The American Artisan
And Hardware Record

L. 54. No. 10. CHICAGO, SEPTEMBER 7, 1907. $2.00 Per Year.

BOLTS

Of All Kinds. Nuts, Washers and Carriage Forgings.

COLUMBUS BOLT WORKS, COLUMBUS, — OHIO —

IN THE FRONT RANK FOR 25 YEARS

"AMERICAN SEAL"

ELASTIC OIL ROOFING CEMENT
STOVE PUTTY and ASBESTOS
FURNACE CEMENT

and the superior quality of these goods is still universally recognized.

THE WM. CONNORS PAINT MFG. COMPANY
MAKERS
TROY, N. Y.

Western Agent
FRIEDLEY-VOSHARDT CO.,
194-204 Mather Street Chicago, Ill.

Southwestern Agent
STOCKHOFF SUPPLY COMPANY
107 N. Main St., St. Louis, Mo.

TRYING to do business without advertising is like winking at a girl in the dark; you know what you are doing but nobody else does.

NEW DESIGN WORLD'S BEST
TUBULAR TRACK DOOR HANGER

We have increased the diameter of the wheel to 2¼ in., making it the easiest running hanger on the market.

The supplementary wheel prevents derailment. Frame is made of best grade malleable iron. Finished in Aluminum and each pair packed in an individual box, complete with bolts. The track brackets are slidable and may be placed at any point desired. We do not sell catalog houses. Write for prices.

SAFETY DOOR HANGER CO.
Manufacturers
Ashland, Ohio Hamilton, Ont., Can.

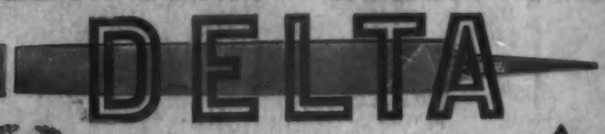
U. S. CLOTHES PINS

Never rust, smut, split, or blow off the line.

Any special clips made to order.

U. S. CLOTHES PIN COMPANY
Montpelier, Vt., U. S. A.

DELTA FILES DELTA FILES



FILES OF QUALITY

Lest You Forget—We Say It Yet

DELTA FILES

TRADE MARK DELTA

CARVER FILE CO., Philadelphia, Pa.

An independent organization not connected with the trust in any form, shape or manner

CHAIN—Furnace, Damper or Ventilator

TRIUMPH"

STRONGEST Chain in the World.

ELEVEN times as strong as Jack Chain.

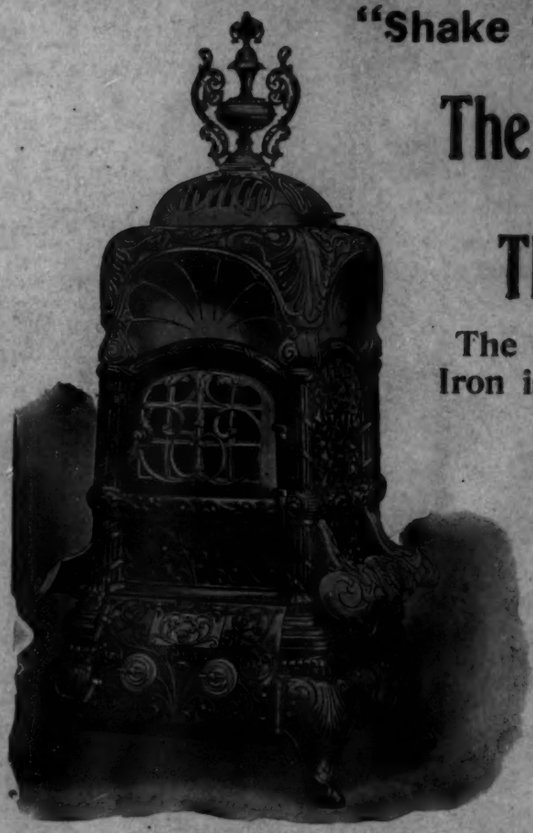
CUTS ARE EXACT SIZE

BROWN"

CHEAPEST because they are the BEST

"Triumph" or "Brown"
MADE IN EITHER
Steel or Brass.
GET OUR PRICES.

E ONLY BY THE BRIDGEPORT CHAIN CO., Bridgeport, Conn.



"Shake the Fire Only Half as Much"

The CINDERELLA Air Tight

Can Now Be Furnished With

The Vertical Blast Fire Pot

The only Hot Blast FirePot in which the Iron is of an even thickness at every point.

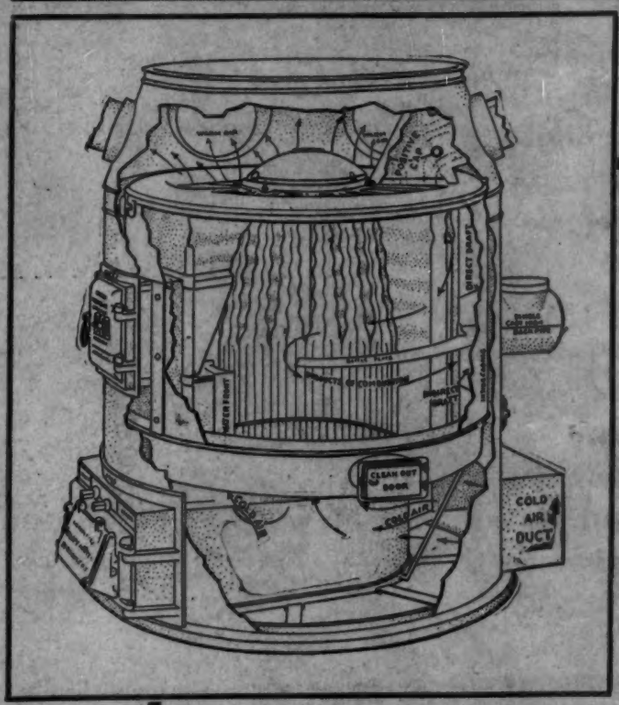
This feature overcomes the tendency to fire crack—a weakness which has been common to Hot Blast Fire Pots.

The Vertical Blast Fire Pot is as durable as a solid simple fire pot and as efficient as the best you have ever seen. :: :: ::

"YOU SHAKE THE FIRE ONLY HALF AS MUCH"

This Fire Pot interchanges with the Solid Pot.

Stove & Range Co. of Pittsburgh, Pittsburgh, Pa.



When a Man is Busy—

He is apt to neglect the future. But if you'll stop and look over the army of over 800 KELSEY Agents you will notice their success at the start was due to the fact that they **looked into the future.**

You may be busy now,—we hope you are,—but don't forget that the man who does the most business and makes the most profit is the man who is planning for **more** business just when he is the busiest. He's busy all the year 'round. Trade comes to him with little effort.

Plan for the future,—take the Exclusive Agency for the KELSEY Warm Air Generator now,—install two or three this Fall and carefully watch their operation this Winter.

Then, next Spring, you can talk from personal experience, and will have these jobs to refer to,—and you'll find them mighty convincing references!

Don't put it off because you are busy now,—plan to keep busy in the future,—to increase your sales and profits.

Just write your name and address on a postal card and say you want that Agency Proposition.

We'll send it,—and submit evidence.

"The Man Who Investigates Buys a KELSEY!"

KELSEY HEATING CO., SYRACUSE, N. Y.

New York City: 156 Fifth Avenue.

VAN EVERA & LEWIS MFG. CO. 104-106 W. Lake St., Chicago.

JAMES SMART MFG. CO., Brockville, Ont., Sole Makers for Canada.

Quick Comfort Gas Heating Stoves

New
and
Neat
DESIGNS
constructed especially for the economical use of

NATURAL GAS

PERFECT
in
Operation
Built so as to secure the proper combustion of the fuel and produce the required amount of heat

RINGEN STOVE CO.

DIV. OF AMERICAN STOVE CO.

ST. LOUIS, MO.

SAN FRANCISCO, CAL. Indiana St., Between 20th and 21st.

Foster's Prize Steel Range

Can't Be Beat

It's a "dealer's money maker" right from the start.

Modern, up-to-date—has *all* the late *improvements* of practical value. Far superior to any other range on the market.

You will fully appreciate its many excellent qualities.

Bound to Please

your customers with a "Prize".

Send for illustrated catalog.

Foster Stove Company

IRONTON, OHIO

The MASTER ECONOMY is a SPECIALTY

It is more different from the common run of stoves than any other practical heater on the market. It has a

Tremendous Sale

NEW IDEAS have been incorporated in the construction of this stove. It is a giant among others—

Chief of Them All

The Master Economy is a Specialty—the best specialty now before the trade. It is a base heater for hard coal, soft coal, or wood. A stove that is economical.

It is THE master of economy. Built well, durable. It is a heater that will sell

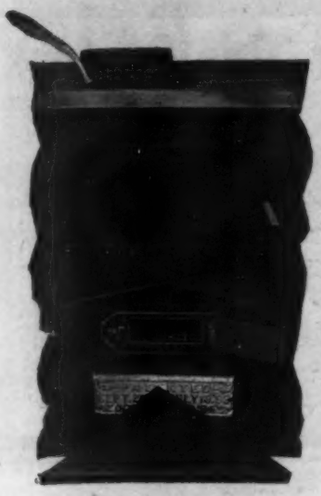
Because

It saves one-half the fuel.
It is noted for simplicity.
It is highly ornamented.
It is a heater that gives absolute satisfaction.
It pays a Good Profit.

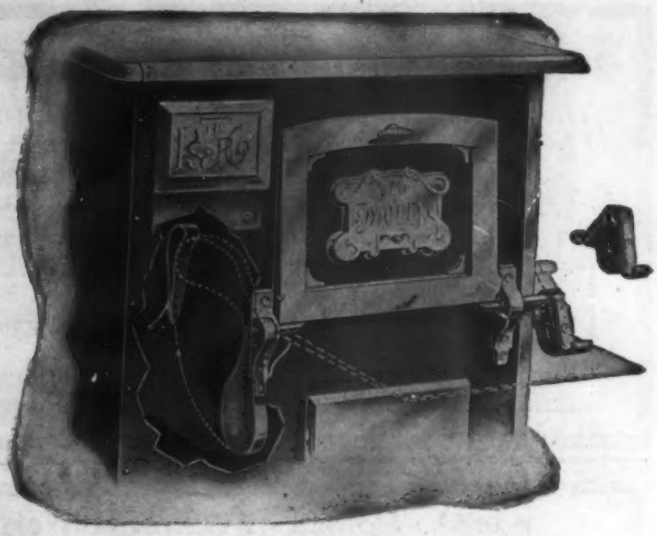
MANUFACTURED BY

Comstock-Castle Stove Co.

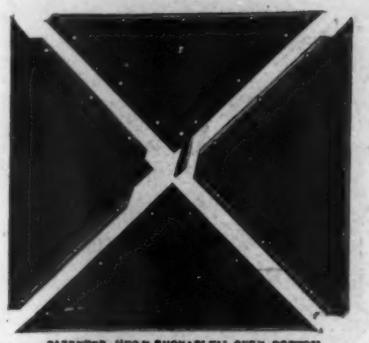
Quincy, Ill.



Our "Non Buckable" Oven Bottom in **Range** with front section removed showing ribbed **Flue Bottom** covered with asbestos cement.



The above cut shows the Famous "Patented Balanced Oven Door" used only on **Model Steel Ranges.**



PATENTED "NON-BUCKABLE" OVEN BOTTOM

This cut shows our Patented "Non-Buckable" Oven Bottom with sections separated. It "Makes Good" the weakest point of Steel Range Construction. "No more lop-sided pies with the 'stuffin' all on one side."

The Patented **"Non-Buckable"** Oven Bottom is the greatest improvement made in the construction of Steel Ranges for many years.

You can learn all about them and many other **Patented Specialties** in Catalogue No. 18 just issued by

The Portsmouth Stove & Range Company,

PORTSMOUTH, OHIO.

If you haven't received one, send for it. The Model Steel Range is bristling with exclusive **"Patented Good Things."**

Making An Oil Heater

We have seen in our day—a good, long day, by the way—many men and many firms undertake the manufacture of Oil Heaters. But few are left of those who originally entered the race. The rest lacked the infinite patience and perseverence which the business absolutely demands. And this is why it pays you now to tie to a firm which has helped to plant the mile-stones in the history of the business. We have been over the ground from beginning to end, and the stove which we give you is the finished product of that experience.

No. 30

We Aren't Making the Mistakes of Beginners

If a new concern were to attempt to duplicate our burner outright, it could not hope to equal us in perfection of combustion, for as much depends upon skillful adjustment, after the parts are made, as upon proper construction. The exact proportion of air supply is too delicate for measurement by anyone except a specialist in the business. Order a sample, test it, and you will have our strongest argument.

We are quoting the trade a schedule which enables them to put in stock a first quality stove at a price which many manufacturers exact for goods without merit. Writing for it is a splendid investment of time, stamps and stationery.

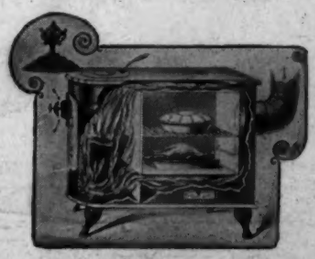
GLAZIER STOVE COMPANY

CHELSEA, MICHIGAN

Chicago Agents { W. D. SAGER, 38 Michigan St.
HIBBARD, SPENCER, BARTLETT & CO.

Sell The Cosby Patent Baker & Heater This Season

The fastest selling stoves on the market, because they fill the needs of the people. Cosby Baker and Heaters do **double** work — they **cook** anything—**heat** any room. Bottom and top of cast iron. If you want to sell more stoves—to make more **money**—write us **at once** for full information. Merchants everywhere are adding the line. We are doing much general advertising.



Union Stove Co., (Inc.)
501-2 Mutual Building Richmond, Va.

More Points of General Merit
are found in the
PEORIA LEXINGTON STEEL RANGES
than in any other

They have all the latest improvements of practical value to Steel Ranges. They are the best, most substantial, most perfect operating ranges made. There are

Many Good Features

embodied in the Peoria Lexington Steel Range. Thermometer in Oven, Large Fire Box, Duplex Grate, Deep Ash Pit, Large Bailed Ash Pan, Ash Chute, Large Pouch Feed Door with Register and Zero Drop Handle, Cast Iron Back Flue or Smoke Box, Oven Bottom very heavy, securely braced. NEVER BREAK OVEN DOOR (recently patented), High Closet Roll Top Door, Enameled Reservoir, Nickel Ornamentation very elaborate, elegant and attractive, Aluminized Oven.

Write for Printed Matter.

Culter & Proctor Stove Co.
Hamilton and Water Street PEORIA, ILLINOIS
Our Motto is and Always has been Not How Cheap—But How Good.

STEEL CASING RINGS

Are Made to Conform to Individual Requirements in Every Respect

NEVER BREAK **CIRCLES PERFECT**

With Lugs—For Double Casings
Without Lugs—For Single Casings
Full Circles—For Ordinary Use
Partial Circles—For Full Cast Fronts

Always to Exact Circumference From Your Own Dimensions
Write Now

READY TO USE **INCREASE PROFITS**

THE WALWORTH RUN FOUNDRY CO., 27th St., S. W., **Cleveland, O.**
Makers of Fine Grey Iron Castings :: :: Mfrs. of Semi-Steel Registers

MICA

ASSORTED PACKAGES Put Up Expressly For the Retail Trade.

ONE POUND—4 SIZES

¼-LB. EACH SIZE

North Carolina, $3.05 { 4 x6 2¾x3¼
Wyoming . . . . 2.62 { 2½x3 2 x5

TWO POUND—8 SIZES

¼-LB. EACH SIZE

North Carolina, $5.95 { 2x3 2¾x3½
2x4 2½x3
Wyoming . . . . 5.10 { 3x3 2¼x5
3x4 4 x6

THREE POUND—12 SIZES

¼-LB. EACH SIZE

North Carolina, $8.55 { 4 x5 2¾x3¾
2¼x4½ 2 x4
3 x3 2¾x2¾

Wyoming . . . $7.35 { 2½x3 5 x6
2 x3 2¼x5
2 x4½ 2¼x3½

STANDARD PRICE LIST OF ALL SIZES WITH DISCOUNTS ON APPLICATION.

EUGENE MUNSELL & CO.

NEW YORK 358 Dearborn St., CHICAGO

A Profitable Business

Cannot be built up with a poor line of ordinary stoves.

Why Not go at it right to improve your opportunities to get the stove business in your town and **Make It Pay.**

The Gold Coin
Ventiduct Base Burner

is the stove that will—if given a chance—increase your business, make it a more profitable business. It is the only Ventiduct Base Burner on the market, all others are Base imitations.

WRITE for illustrated catalog.

Chicago Stove Works,

Blue Island Avenue and 22nd Street, Chicago, Illinois.

Lion Furnace

Can use Hard or Soft Coal

Giving the
GREATEST HEAT
with the
LEAST FUEL
Pot interchangeable with our
APEX FURNACE
Durable, simple in construction and a
FINE SELLER
Write today for catalogue.

Rood & McIntyre, Kansas City, Mo.
Southwestern Distributors

YOUNGSTOWN FURNACE & SUPPLY CO.

YOUNGSTOWN, OHIO

Chicago Office, 211-213 Lake Street

It Means Profit—Dollars and Cents—not alone that but—**For You**

YOUR RANGE BUSINESS WILL BOOM

if you will sell

THE WILLARD STEEL RANGE

It is not a cheap range but a good, honest quality range at a L-O-W P-R-I-C-E. A better range than you can get anywhere for the money. Durable—will last a lifetime. Economical—a fuel saver.

THE WILLARD STEEL RANGE is up-to-date in every respect, combining every possible improvement. It is bound to satisfy the purchaser, bound to sell, and the dealer that sells the "Willard" is bound to make a G-O-O-D P-R-O-F-I-T. Write and I will make you the greatest (most profitable) proposition ever offered.

YOUR OWN NAME PLATE ON RANGES ON ORDERS OF TEN OR MORE

WM. G. WILLARD, Room No. 28 Willard Bldg., (316 CHESTNUT STREET) **St. Louis, Mo.**

A Strong Selling Combination

When you consider the quality of materials we use and the quality of finish we produce in the manufacture of

Champion Steel Ranges

You will readily see what a strong selling combination we offer you. By selling the *Champion Steel Range*

You Can Successfully

overcome the cut-price, cut-quality kinds of competition and make a good profit too. Your interest in our catalog is sure to be of money making benefit to you. Send for it.

Champion Steel Range Co.,
CLEVELAND, OHIO.

Many Practical Improvements

ARE FOUND IN OUR LINE OF

Warm Air Furnaces

As fuel savers they can't be equaled. Noted for **Simplicity** and **Durability.** Made in every style—for every fuel—all cast iron—all steel—cast iron or steel radiator—adapted for every climate—money makers for dealers that sell 'em—satisfaction for the people that use 'em.

Write for printed matter and prices.

WALTER S. RAIT & COMPANY, 211-213 LAKE STREET, CHICAGO, ILL.

There are people in your locality who will buy

if you will tell them how good they are. If you have never sold Barler Heaters try an assortment of four or five sizes and place them in a row in your store. You will find it pays to sell Barler Heaters.

We will give you a guarantee.

A. C. Barler Mfg. Co.
104-106 Lake Street, CHICAGO.

BOOMER FURNACES

Quickly Establish a Local Reputation

It is always a little hard to introduce an old Furnace in New Territory.

But the first BOOMER Furnace you sell will pave the way for an unlimited profitable furnace business.

It is likewise better to take an old, time-tried furnace like the BOOMER, and sell it in new territory, than to continue selling, or endeavoring to sell, a Furnace that does not "stand up" the way you would like to have it.

The BOOMER Furnace is one of those always-reliable, sure-to-give-satisfaction commodities that is a genuine pleasure to sell.

The BOOMER Agency, remember, has attractive inducements.

We'll gladly send you our Furnace catalogue upon request.

The HESS-SNYDER COMPANY
Manufacturers **MASSILLON, OHIO**

NEW HOME OF THE

Front Rank Steel Furnace

We are now located at **4045-4047 Forest Park Boulevard,** in the heart of St. Louis. Our factory is equipped with the latest and best machinery and our facilities are unexcelled for good work and prompt shipment.

In the FRONT RANK STEEL FURNACE we have endeavored to embody everything essential for a first-class heater. The material used is of the best heavy armor plate steel and the riveting is done with heavy machinery using great pressure and making the same perfectly tight so that gas or dust cannot escape into the rooms. The firepot is lined with genuine fire brick tiling. The grates are heavy, triangular, and work independently. The base and bottom casing ring are a single casting and make a solid support for the furnace in any kind of cellar.

We want live agents in every town. Write for catalogue and terms.

Haynes-Langenberg Mfg. Co.
4045-4047 Forest Park Boul.
ST. LOUIS, MO.

Large Radiating Surface Important

It is the radiating surface which determines the amount of heat a furnace is going to get out of the fuel used. The size of the fire pot determines the amount of fuel a furnace will burn.

Lennox Torrid Zone

steel furnaces have very large radiating surface nearly doubled in area by the extra indirect radiator through which the hot smoke is made to pass for eight feet of smoke travel. A hanging partition in this radiator causes the smoke to descend within eight inches of the bottom of the radiator before passing up the other side. This is longer smoke travel than any other furnace has and is possible only by reason of the convenient direct and indirect draft change. In Torrid Zone furnaces the indirect draft does not have to be strong enough at all times to permit of opening the fuel door for the direct draft can be had at one pull of a damper rod. Thus when fuel door is closed and damper is turned for indirect draft more of the hot gases can be held back from escaping up the chimney and used as fuel. This makes Torrid Zone furnaces fuel savers. It is only one of the many great selling points of this furnace.

WRITE FOR 40-PAGE CATALOG

Lennox Furnace Co.

Marshalltown, Iowa

BOYNTON'S

Warm Air Furnaces

Hot Water Heaters and Steam Boilers

BOYNTON'S PATENTED SQUARE POT

Have stood for an honest value for nearly sixty (60) years—more than half a century. Their reputation has a firm foundation. They were the best then, they ***are the best now. Always first*** with every ***real improvement.***

Boynton Furnaces are made of cast iron or steel plate, or combination of both — portable or brick set—for hard or soft coal, wood, lignite, or any fuel, and are adapted for any climate.

The New Patent Square Firepot Found in all Boynton Latest Pattern Furnaces

Boynton Furnaces have built a ***reputation*** for many dealers and they ***will do*** the same ***for you.***

Catalogue and Prices Cheerfully Sent on Request.

BOYNTON'S CRUSADER FURNACE

Do You Want

To build a reputation for yourself
To increase your business
To satisfy your customers

Sell the Boynton

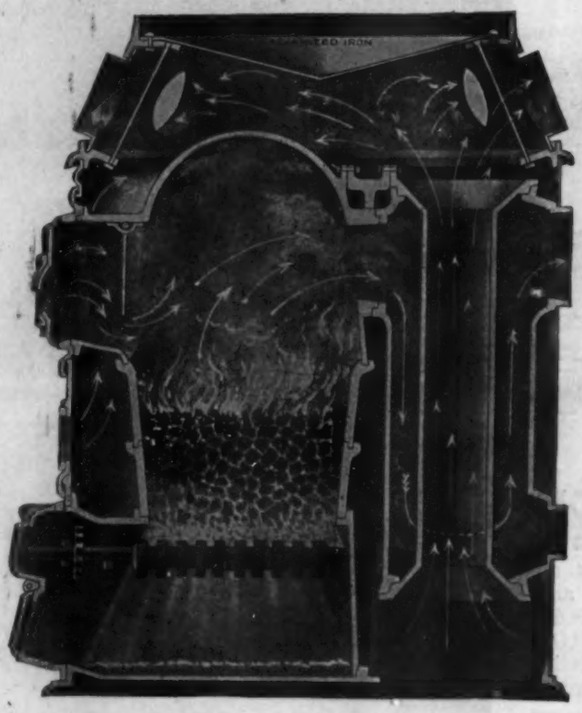
THE BOYNTON FURNACE CO.

147-149 Lake Street
CHICAGO

H. MANNY C. E. MANNY
Chicago Managers

NEW YORK OFFICE, 207-209 Water St.

PACIFIC COAST AGENTS:
J. C. Bayer Furnace Co., Portland, Ore.
Wm. Brown, Spokane, Wash.
Finlay & Robb, Seattle, Wash.
Holbrook, Merrill & Stetson, San Francisco, Cal.



Shaded Sectional Cut

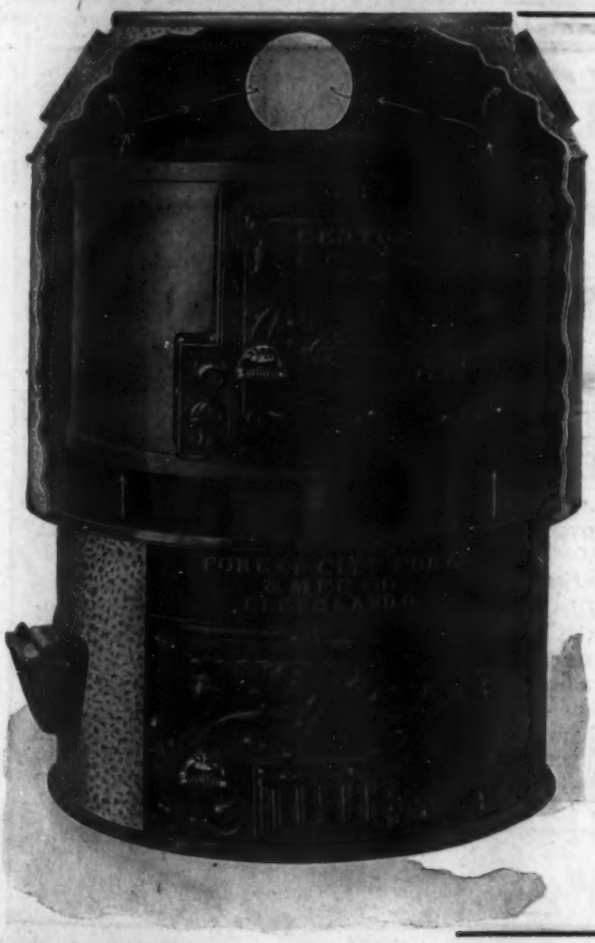
of the

"Low Down" Crown Warm Air Furnace

Designed to show the direction taken by the gases and warm air. Also the thickness and staunchness of its parts.

March-Brownback Stove Co.

POTTSTOWN, PA.



Century Warm Air Furnace

¶ Has many special features which make it the most desirable furnace for any dealer to handle.

¶ The Radiator has triple radiating faces.

¶ The Large Combustion Chamber, formed by the radiator, is a special feature of the Century Furnace, making possible a perfect combustion of gases and deriving the fullest benefits from the fuel consumed.

¶ The Feed Door is Double and unusually large.

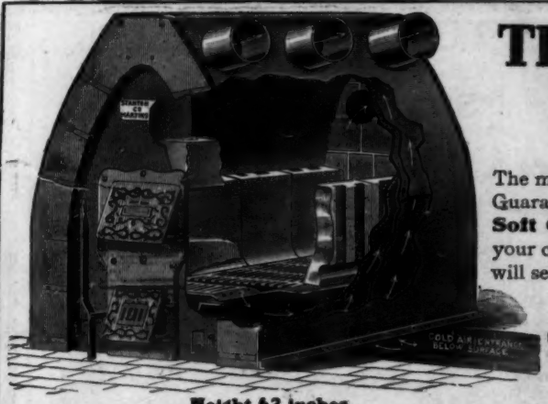
¶ The Firepot is deep and made in sections.

¶ The Ashpit is very large and the heater is easily cleaned and operated.

Send for New Catalogue.

The Forest City Foundry & Manufacturing Company.

Cleveland, Ohio.



Height 62 inches.

The Stanton Seamless
Slack Burning Furnace

Made of Locomotive Fire Box Steel

The most perfect smoke and soot consuming furnace on the market. Guaranteed absolutely smoke and gas tight. Recommended for **Soft Coal Slack,** the use of which will reduce the fuel bill of your customer more than one-half. One sold and properly installed will sell another.

Write for catalogue and discount.

The Stanton Heater Co.
MARTINS FERRY, OHIO

Dealers Who Are Selling The

NEW AKRON
AIR BLAST FURNACE
CONTROL THE TRADE

The NEW AKRON AIR BLAST embodies all the GOOD FEATURES of the old original and many new ones. You can not afford to handle any other furnace when you can get the AKRON AIR BLAST. Read the testimonials from parties who have used the furnaces from 15 to 17 years.

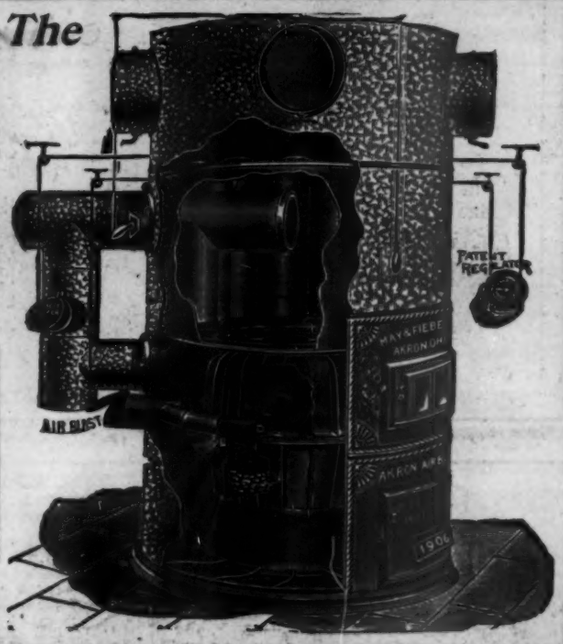
AKRON, OHIO, March 25, 1907.

MAY & FIEBEGER,
Akron, Ohio.

GENTLEMEN:—The Akron Air Blast you installed in our home in 1893 has always given perfect satisfaction. Two years ago we had the furnace slightly repaired, but have never had any trouble with it. The furnace has never had to be taken down to be cleaned, so can truthfully say the self-cleaning quality is a wonder.

I rank the Akron Air Blast Furnace as the most economical, the most durable, the most reliable and easiest operated furnace on the market.

Respectfully,
MRS. G. ROUSSERT.



Send for Catalogue and Prices to the Manufacturers

MAY & FIEBEGER, Akron, Ohio

A Furnace With Special Features

Which will appeal to your customers with a big margin of profit is what you are looking for. Why sell a Furnace almost like your competitor's? A man to make money must get a specialty and push it. It costs no more than any good furnace and sells a great deal easier.

GREEN'S COLONIAL FURNACE

Hot Air Blast Fire Pot which allows the heated air to pass into and over the fire, converts the gas and smoke into heat ***reducing coal bills.***

Double Feed Doors which admit large chunks of coal.

Long Distance Heating by means of the oval opening through the center of radiator. The rooms fartherest from the furnace can be as easily heated as rooms with short runs. Heavy radiator with ***long smoke travel,*** provided with ***direct draft*** and cleanout.

Grate bars ***each operating independent*** of the others, three outer supports instead of one inner support; ***deep ash pit, large combustion chamber; water coil pocket; one-piece base ring; large hot air chamber. Heavy, Durable, Economical.***

WRITE FOR DISCOUNTS! ORDER A SAMPLE

Green Foundry and Furnace Works, (Dept. A) Des Moines, Iowa

The Record of the

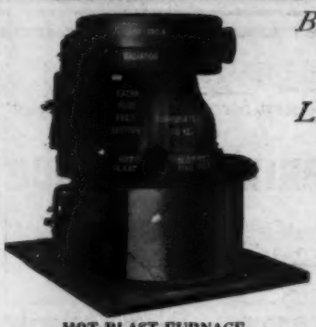
FLORAL CITY FURNACES

During the past ten years has never been equalled. They are, as a line, the BEST FITTED AND MOST POWERFUL, ECONOMICAL AND DURABLE FURNACES MADE, and we stand ready to prove this at any time by actual test. Perfect castings, skillful workmanship, careful supervision, these are the features that mark the superiority of the Floral City.

Monroe Foundry & Furnace Co., Monroe, Mich.

Robinson Tubular Furnaces

Give Entire Satisfaction. Absolutely the Best Furnaces on the Market.



HOT BLAST FURNACE.

BECAUSE—

They are the only Tubular Furnaces having **direct draft and return flue with long fire travel,** which means—***LESS FUEL***—

LARGE RADIATING SURFACE—

The fire travels farther in the *Robinson Tubular Furnace* than in any other and this adds to the heating capacity—***MORE HEAT***—

The Robinson Hot Blast Furnace

"Corrugated Dome and Cast Radiator"

is a first-class furnace, up-to-date in every respect, simple in construction, but very effective in keeping a clean, bright fire. Positively gas-tight throughout.

SEND FOR CATALOG.

TUBULAR FURNACE.

Robinson Furnace Co., 107-109 Lake Street, CHICAGO, ILLINOIS

GILT EDGE BADGER FOR HARD COAL

COMBINES ALL THE FEATURES

necessary to make it a most convenient perfect working and economical furnace.

CAST FIRE SECTION

with steel dome and return flue radiator.

PERFECTLY BUILT

and perfectly mounted and having the best of all modern conveniences. Made in 20, 23, 26 and 29-inch fire-pots.

CATALOGUE ON APPLICATION

R. J. SCHWAB & SONS' CO.,

MILWAUKEE, WIS.

BE AN EDUCATOR

When figuring heating work, educate your customers to the fact that the Best is None Too Good for him, and in the end is the Cheapest.

THEN GIVE HIM THE BEST

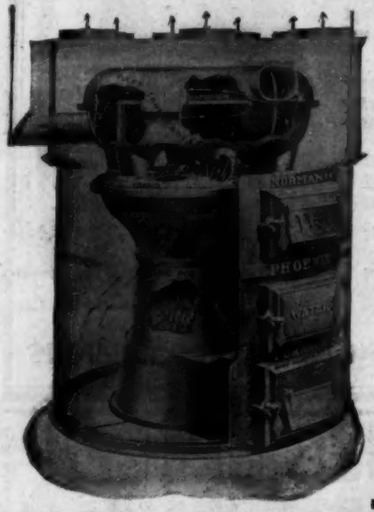
For many reasons, too numerous to mention here, the "MUELLER" All Cast, Double Radiator Furnace is the BEST. It is the most powerful and economical, and will last a lifetime.

Our catalog tells all about the full line of "MUELLER" Furnaces—ask for a copy if you have none.

We also make a complete line of Cast Iron House Heating Boilers.

L. J. Mueller Furnace Company

Established 1857 — 191 Reed Street, MILWAUKEE, WIS.



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Don't be deluded into buying and installing cheap furnaces—It doesn't pay

The "Norman" Phoenix is the Furnace

to install. The most advanced methods of furnace construction have guided us in the manufacture of the "Norman" Phoenix. The name "Normon" stands for

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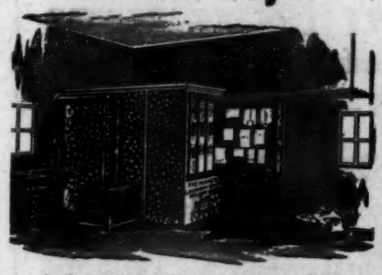
Just out—a furnace book that will interest every dealer. There are many points of FINANCIAL VALUE in it. Send for this book—we'll send it to you ABSOLUTELY FREE on request.

GALUSHA STOVE CO. :: Rochester, N. Y.

The "Manest" Family Clothes Dryer



A LAUNDRY STOVE AND DRYING CABINET COMBINED

ONE FIRE

Boils the Clothes
Dries " "
Heats the Irons

FOR RESIDENCES, APARTMENT HOUSES, INSTITUTIONS, HOTELS, ETC.

Manufactured by

The Mannen & Esterly Co.
CLEVELAND, OHIO

Hot Water Heater

Gas or Gasoline

For bathtubs, hotels, restaurants, undertakers, barbers and family use. Has a

Perfect Circulation Through Copper Coil

at bottom, all water drawn through the coil. Hot water in small qualities in **one minute, fifteen gallons** in twenty minutes.

Send for illustrated catalogue.

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Please send us THE AMERICAN ARTISAN each week for three months. At the end of that time we will remit Two Dollars for one year's subscription, or 50 cents in case we decide to discontinue.

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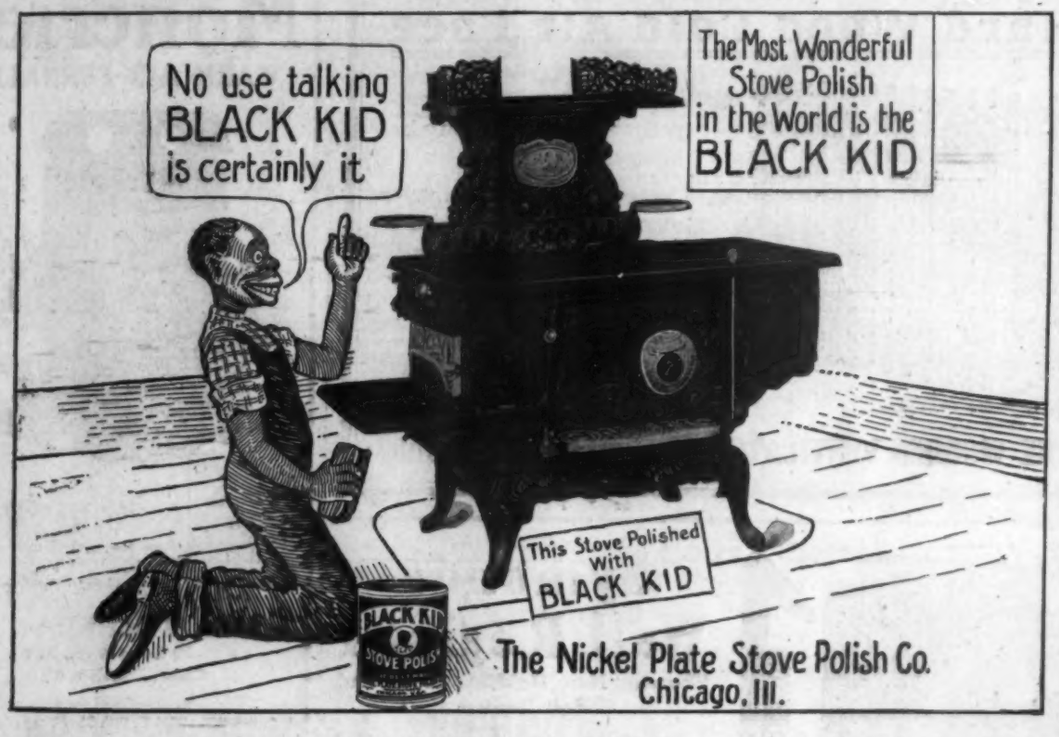


PERFECT FITTING JOINTS VENTILATION

The Improved

Handy Furnace Pipe

is made of heavy bright tin—**Absolutely Safe**—Its joints fit perfect. Handy Pipe and Fittings insure perfect ventilation.

MR. DEALER:—

You can make money

handling the **Improved Handy Furnace Pipe.** The usual loss of time (time is money) is entirely obviated by the use of this pipe. It can be practically thrown together,—very simple to install. One end is ⅝ inch larger than the other. It has the longest slip of any double wall pipe manufactured.

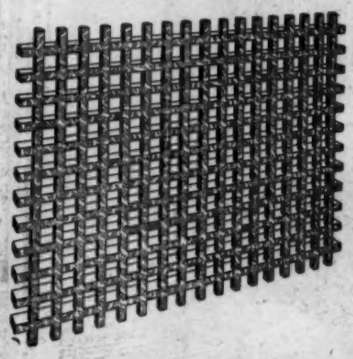
Large stock always on hand, all orders large or small receive immediate attention.

Send for samples (free) catalog and prices.

F. MEYER & BRO. CO., Peoria, Ill.

CLOSE THE CONTRACT FOR A FURNACE
by showing your Customers a

Hard Wood Cold Air Face



¶ You can underbid your competitor—and still make money.

¶ They are the most sensible—more pleasing to the eye—and will bring better results than iron or steel.

65 Cents the Square Foot

Let us fill your order—it means an increase in business to you.

THE WOODEN VENTILATOR CO., East Palestine, Ohio

Economy, Cleanliness, and Durability all combined in the

Moncrief
WARM AIR FURNACE

A few of the many good points of the Moncrief
- All Cast Iron
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Hold Fast Hook and Bolt Device
Patent Pending

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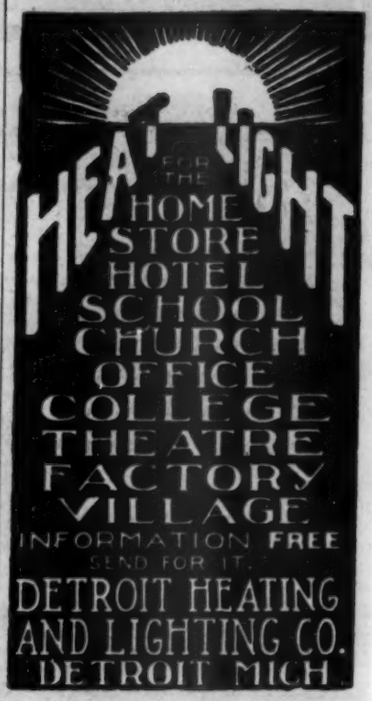
Showing New Holdfast Hook and Bolt Device.

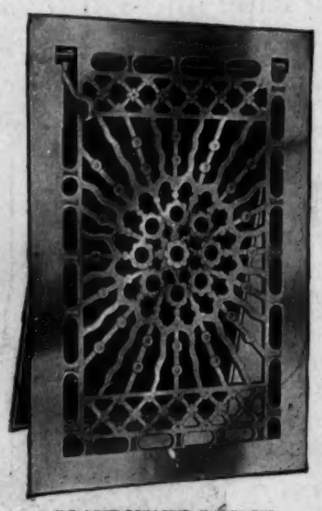
One of the styles we make to install above baseboard—installation not necessary until building is finished.

New Hook and Bolt device eliminates tin strap, rivets, cleats, wood, screws, wire and nails. No breaking of plaster. Conforms with strictest fire laws. Saves time and money. Do you catch on, the hook does.

SYMONDS MFG. CO., EAST ST. LOUIS ILLINOIS



WAFER SIDE WALL REGISTERS



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To Set VERTICALLY or HORIZONTALLY
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As Thin as a Wafer

Made with a single steel valve.
1 inch deep only when closed.
For shallow flues and thin partitions.

T. & B. REGISTERS
have stood the test for 60 years—will last a lifetime.

A large stock always on hand for immediate shipment.

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NEW YORK CHICAGO BOSTON

100 Tinners' Patterns

Complete for ... $1.00

Sent Postpaid on Receipt of Price.

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The Novelty Warm Air Furnace System

An absolutely sure and correct method of securing the best and most healthful results in heating and ventilating residences or other buildings. Approved by Heating Engineers, Architects and Physicians. Do **you** wish to **know** more about it?

THE NOVELTY FURNACE HAND BOOK WILL TELL YOU.

ABRAM COX STOVE COMPANY,

15 to 19 West Lake Street, Chicago.
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REGISTERS

Semi-Steel Floor—Cast Iron Floor
Wrought Steel Special Side Wall
Cast Iron Special Side Wall

We make them all—in all Finishes
Get our prices before buying

ESTABLISHED 1857

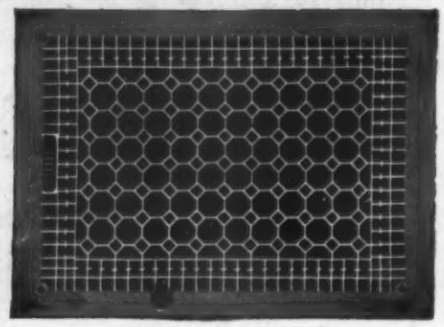
L. J. MUELLER FURNACE CO., 191 REED STREET, Milwaukee, Wis.

Ferrosteel Registers

The only house in the world manufacturing

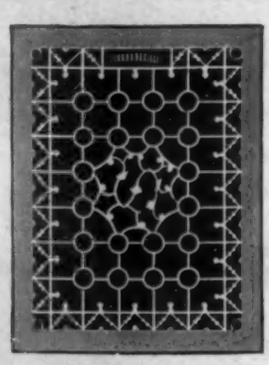
CAST IRON FLOOR
SEMI STEEL FLOOR
WROUGHT STEEL FLOOR
CAST IRON SPECIAL SIDE WALL
WROUGHT STEEL SPECIAL SIDE WALL
FLAT OR CONVEX EXTRA SHALLOW SIDE WALLS
DEFLECTORS, PANCAKES, WAFERS

In all Designs and Finishes.
Mechanism Perfect.
Capacity Greatest.
Finish Unsurpassed.
No reputable line can undersell us.



Moorish Design

Ferrosteel Company, Cleveland, Ohio



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WE DO NOT BELONG TO THE ASSOCIATION
MAKERS OF WARM AIR REGISTERS

Neat in design and of superior finish. Are interchangeable with all first class makes. We have the largest foundry of any Register manufacturers in the United States.

Our molding room 75x950 feet. We carry large stock insuring prompt shipment.

Get our prices. We can save you 25%.

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Register Department of The Standard Foundry & Mfg. Co.

Round Oak Furnaces

are the

STANDARD of AMERICA

They are constructed with the greatest possible care of the very best material obtainable by skilled workmen

NO BETTER LINE OF GOODS EXIST
for any dealer to make a reputation with.

The ROUND OAK

is a furnace that will prove absolutely satisfactory to the user, and the dealer that is wise enough to sell it

WILL MAKE MONEY

ITS ADVANTAGES:

The Ash Pit or Furnace Bottom is one solid, single-piece casting and has the *door frame cast on, doing away entirely with any leakage of gas or smoke* between the door frame or furnace.

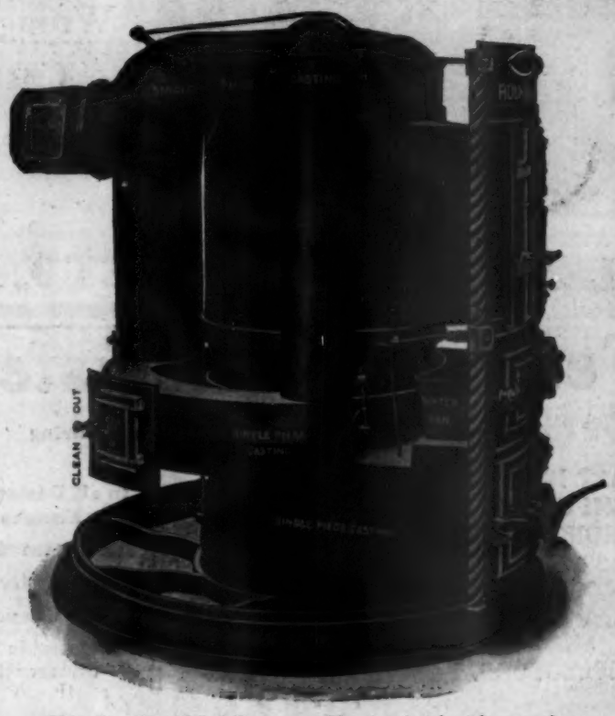
The Bottom Ring on which both furnace and casing rest, is cast in *one piece.*

The Triangular Revolving Grate used in the Round Oak can be *shaken* from the *outside,* without opening the Ash Pit Door.

The Feed Doors are extra large.

The Dome is made in one single piece casting.

The Return Flue feature of the Round Oak Furnace has proven to be a *good one.* All *Round Oak Furnaces* are equipped with our special *Hot Blast* attachment.



Side view Round Oak Furnace without galvanized iron casing.

The Round Oak Furnace will burn any kind of fuel, hard or soft coal, coke or wood.

OUR CATALOGUE

which fully describes the many good features of the Round Oak Heating Stove, Round Oak Chief Steel Range and the Round Oak Furnace will be

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FRED E. LEE, Pres. and Gen. Mgr.

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ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

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IN FOREIGN COUNTRIES INCLUDING CANADA, ONE YEAR, POSTAGE PAID, $4.00
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DANIEL STERN, PUBLISHER AND PROPRIETOR,
69 DEARBORN STREET, CHICAGO, ILL.

Entered at the Chicago Post Office as Second Class Matter.
THIS PAPER IS A MEMBER OF THE CHICAGO TRADE PRESS ASSOCIATION.

CHICAGO, SEPTEMBER 7, 1907.

TIME to think about holiday goods!

THE whirr of the busy harvesting machine has silenced the voice of the croaker.

FAIR crops at good prices should make the farmer happy and satisfy the rest of us.

IF Postmaster-General Meyer had ever been a retail merchant he would not think of planning for a parcels post.

THIS thing of hitting the head of a corporation whenever you see it is a pretty cheap kind of business after all.

WIRE products are up a dollar a ton, following last week's announcement that wire manufacturers regarded conditions as "ideal." It is a pure case of demand exceeding supply.

DR. SHAW, ex-secretary of the treasury, has placed his finger on the public pulse and diagnoses our case as showing "great need of universal sanity." His remark that "capital cannot be forced into activity, but it can be forced out of activity," is pregnant with meaning.

LEADING producers and selling agents of copper announced September 3 that they have established a new price of 18 cents a pound for electrolytic copper, a break of four cents from the recent price. It is hoped that by this action the deadlock in the copper market may be broken.

THE average fire loss in the United States is said to be more than $2 per head of the population, as compared with only one-third of a dollar in six of the leading European countries. The difference is ascribed to less rigidly enforced building laws. It has an effect on the cost of business generally in this country.

THE TRADE of the United States with Cuba in the fiscal year just ended aggregated almost 150 million dollars. The imports from the island were approximately 100 million dollars in value and the exports thereto nearly 50 million dollars. In both imports and exports the trade with Cuba during the year far exceeded that of any previous year. An instance of the increase of exports is found in the item of builders' hardware, of which $573,507 worth was exported in 1907 as compared with $314,205 worth in 1903. The reciprocity treaty with Cuba went into effect in December, 1903, since which time our trade with the island has steadily increased.

Time To Ca a Halt.

IN THESE days of strenuous deliverances by public men, of sensational court proceedings and findings against corporations, and of wholesale denunciation of everything that pertains to corporate wealth or combined capital, it is a relief to read such sane, conservative, and truly statesmanlike utterances as have recently come from a former justice of the Supreme Court of New York, Morgan J. O'Brien, who takes exception to the general denunciation of leading business men and corporations in language that is characterized by sober common sense.

The judge takes cognizance of the fact that high public officials have acquired a fashion of denouncing somebody or something in every public utterance in such a way as to make exceptions look like generalities, and urge drastic legislation and spectacular prosecution at every opportunity, giving the common public the impression that most of the leaders of the business world are lawbreakers and evildoers. There is therefore a novel and welcome tone in the statement of Judge O'Brien that "We know that the great majority of our business men are honest and law-abiding and because of the bad conduct of some it is manifestly wrong to arraign all."

We have had of recent years a surfeit of yellow denunciation of corporate wealth and enterprise. If, as the New York Commercial recently pointed out, it were not strictly true that the vast majority of business men are honest and incorruptible, the whole financial, commercial and industrial fabric of the country would go to pieces inside of twenty-four hours.

The dishonest and merely tricky men are so far exceptional that the discovery and exposure of one occasionally creates a genuine sensation in the business world. The whole warp and woof of business, says the Commercial, are made up of credit, confidence, character and reputation, and whenever and wherever one or the other becomes in the slightest degree impaired the rest of businessdom promptly turns its back on that quarter.

"Probity refuses to touch elbows with corruption, and the very fact that business goes on from day to day is proof that the corruption in it is infinitesimally small in volume compared with the probity."

Judge O'Brien made a most significant statement when he said: "It is obvious that some other cause must be found for our investors' panic than the world-wide scarcity of money.

"This panic is due to a growing lack of confidence in values, caused by persistent attacks upon important business interests and threats made by men holding high public office that other attacks of a similar or even more destructive nature are in contemplation. The entire business interests of the country are being arraigned without limitation or distinction, and the attacks are falling, like the rain, equally on the good and the bad.

"Current criticism of corporate management is too indiscriminating."

The remedy for the existing state of affairs, according to Judge O'Brien, is for the Federal Government and State Governments to suspend "the holy war which has now come to be regarded, whether rightly or wrongly, as involving the general stability of business interests, until the courts have had an opportunity to pass upon the legal questions involved in legislation already enacted and in prosecutions now pending."

In such a suspension of active hostilities against corporate wealth it is contended that the highest form of generalship will be shown. The opinion is spreading that it is time to call a halt. We need a rest. We want to know what the United States Supreme Court thinks of certain sensational doings in the lower Federal courts before proceeding further in our lurid legal tilt against corporate enterprises.

American Trade Obstacles.

FROM time to time our consuls in foreign countries discuss the question of the handicaps and hindrances in the extension of the export trade of the United States and give examples of mistakes made by our exporters in their foreign dealings. Such reports reach Washington so frequently and are so emphatic in their language that we cannot doubt that they are founded on facts and not on fancy. A typical report of this character was recently made by our consul-general in the important Belgian city of Antwerp, Mr. Henry W Diederich, who said:

"American manufacturers are constantly soliciting new markets in foreign countries through the American consuls, who in turn are earnestly endeavoring to further the interests of American trade. The obstacles in the way, however, are not all on the side of the foreign buyer. According to an inquiry I have instituted on this subject, I find complaints against the methods of American exporters to be quite numerous. There is general objection to the system adopted by many American houses of demanding either a deposit with order or cash against documents, even when shipping goods for the first time and with a desire to capture the market. No foreign house can be induced to buy untried goods by any such methods, no matter how large the prospective profit may be.

"To demand part payment with order is a condition that is apt to blight the enterprise from the very start. The foreign buyer argues that if the American manufacturer is anxious to reach a new market he should be ready to put some money into the venture and await results, and that by refusing to do so the manufacturer shows that he has no confidence in his own articles. In the sale of American goods, to require cash against documents in the first transaction, before the buyer can see what is shipped to him, arouses the suspicion of the importer and, in a majority of cases, stops the deal altogether. This one-sided policy and apparent lack of good will and co-operation with the foreign importer in endeavoring to secure markets abroad is one of the gravest errors our manufacturers and exporters can commit."

Another cause of frequent complaint found by our Belgian consul-general is the failure of the American manufacturer to supply goods on time, this referring particularly to American machinery and kindred products. The British manufacturer takes advantage of such delays and supplants his American competitor when prompt delivery is required.

The books of the largest importer of American machinery, machine tools, and machine accessories in the Antwerp consular district were courteously shown to Mr. Diederich and he found that orders for boat motors, pumps, parts of machinery, etc., given to American manufacturers had not been executed sometimes for periods varying from four to eighteen months, when the customer had ordered by cable and desired immediate delivery. In a number of such instances of unpardonable delay British houses were appealed to and the goods were delivered and paid for by the consumer long before the American house thought of executing the original order.

Several other annoying experiences of Belgian importers of American goods are reported by the consul-general, who says that such annoyances bring much discredit to American goods in foreign markets.

Valuable advice is given American manufacturers by Consul-General Diederich, when he urges those who mean business to send their own men to canvass the continental European market and not trust local agents to introduce their goods.

RANDOM NOTES AND SKETCHES.

BY SIDNEY ARNOLD.

A young man writes me from a town in the interior of Illinois as follows:

"Will you please advise me as to the best way to become a stove and range salesman. Wishing to take up this work and not knowing the best way to begin, I write to you for the information. Thanking you in advance for any trouble this may cause you, I inclose stamp for reply."

This is a good sample of many inquiries which I receive in the course of a year from ambitious youths who are led to believe that the life of the traveling stove salesman is all peaches and cream. If I were to answer some of these young men as frankly as the nature of their letters demand I should be tempted to tell them first of all to learn to read and write their own language correctly, but inasmuch as a large percentage of them are so evidently immature, I refrain from criticizing them in this particular, and will answer their direct question as best may be in the limited space at my command.

"The best way to become a stove and range salesman," my young friend, is to fit yourself by study of the business for the work of selling the goods. There is no royal road to learning the business. Hard work and plenty of it is the only sure foundation for success.

If you determine to become a stove salesman and make that your object in life, everything else that you do will be subordinated to your chief aim. You will not only learn all about the goods you propose to sell.

the methods of manufacture, and the materials and processes that enter into the making of a stove or range, but you will constitute yourself a willing receptacle for every possible bit of information regarding stoves and ranges that may happen to come your way. This you will do in order that you may be able to talk about your goods in the future, not only intelligently, but also interestingly and convincingly, so as to make sales.

From the outset remember that that will be your main object—to make sales. "It is orders we want, not expense accounts!"

A stove or a range is not the easiest thing in the world to sell, and as it is always well to walk before one tries to run, it will be advisable for you, perhaps, to gain experience by first selling some other line—goods that are more easily sold, that demand less effort on the part of the salesman—for you will find as you grow in years and experience that the goods that "sell themselves" are few and far between.

* * *

To become a successful salesman you must study salesmanship. Nowadays salesmanship is a science and has its schools, colleges and professors, their very existence being a proof that there is much to learn by the novice who would become a salesman.

There is a vast deal of difference between the methods of salesmanship to-day, the methods that win, and the methods of the old-time barterer and bargainer, but to be a successful salesman of the highest grade you must have in your disposition some of the elements that characterized the men who formerly lived by barter and exchange, whose last surviving relative in the United States is the horse trader.

But you will learn all this in the school of salesmanship which you will attend or from the capable sales manager who gives you a chance. At present it will be sufficient for you to realize that when you enter the profession of salesmanship you will require a liberal education in all that pertains to it, just as you would in any other profession.

Of course, in order to become a stove and range salesman it will be necessary for you to secure a job where you will have a chance to sell stoves.

If you are in earnest—and of course you are—you will select your employers with at least as much care as you exercised in selecting your parents.

Then you will make a special study of their product—I mean the product of your new employers—and you must convince yourself before starting on the road that the goods you are to sell are the best on earth.

Do not fall into the error of thinking that they are the only goods on earth, for if you do you will surely have a rude awakening. But the more confidence you have in your own goods the better, as it will enable you the more convincingly to point out their advantages over all other stoves that may be mentioned in your hearing.

* * *

By this time you will be in a position to approach your prospective customer and state your business.

Do not be downcast if he fails to see you at first and seems to be gazing through you into the next county.

That is only a way he has—and besides he himself may have been a stove salesman on his first trip sometime in the dim past.

Treat him kindly and considerately.

Remember that he knows but little about stoves, while you have just spent several weeks or months in learning all about them and in studying the science of salesmanship.

Recall the hundreds of maxims you have read and apply as many of them as possible to the case in hand.

If the stove dealer continues obdurate and still refuses to become aware of your presence, forget all that you have learned, remember you are only a kid after all, brush back the starting tear, and say:

"Mr. Dealer, I am just starting in this business and I want you to give me a show. I am trying to represent Blank & Company, and I know their stoves are all right. Will you kindly spare me a few minutes and just look at these photographs of their new line of steel ranges?"

When you reach the point where you can start like that, kid, the door of Opportunity will open wide to you and Success will be in sight.

* * *

SCENE—The elegantly appointed and highly luxurious office of the White Lily Mfg. Company in the busy burg of Davenport, Iowa; velvet carpets, oil paintings, statuary, bronzes, bric-a-brac, etc.

DRAMATIS PERSONAE—The genial Sam T. White and the inventive A. F. Victor, officers of the company, busy with correspondence.

TIME—High noon.

A. F. Victor, *loquitur*—"Well, we will soon have a new washing machine on the market."

Sam White—"How so? Have you invented a new one?"

A. F. Victor—"No, but I have just thought of a dandy name for it!"

Curtain!

* * *

I learn from my highly esteemed contemporary, Domestic Engineering, that "the journeymen plumbers of Goldfield, Nevada, have gone on a strike for an increase in wages from $8 to $9 a day, and plumbing work on many large buildings in course of construction has been stopped."

Some important details of this strike are evidently omitted from this brief mention of it. Besides requiring $9 a day instead of a paltry $8, I am sure the Goldfield strikers will insist on all their rights and demand that their pay be handed to them in perfumed pink envelopes on a silver-gilt tray; also that the cashier, bareheaded, drop to one knee before each plumbing plutocrat when passing the platter, and be required to repeat the formula: "Kind sir, condescend to accept this piffling wage of nine bucks per. Thy merits are great and thou deservest more, but it is all we have in the till."

Thus will the employer be kept from getting proud and all hands will be satisfied—until the strike fever returns.

News Siftings

The total production of all kinds of pig iron in Canada in the first half of 1907 was 270,100 gross tons, as compared with 282,010 tons in the corresponding time last year.

The stove dealers of Eastern Pennsylvania, who recently met at the Tower, Reading, Pa., to discuss matters pertaining to the trade, may form a permanent organization.

The Gas Stove Company has been organized at Newark, N. J.; agent, Charles C. Bussey; capital stock, $200,000. Incorporators, E. S. Brewer, William M. Brewer and John D. Scott.

The People's Stove Company, capitalized at $6,000, has been organized at New Orleans, La.; Edward Levy, president; Mrs. Emma Levy, vice president; Oscar M. Levy, secretary-treasurer.

The Portsmouth Stove & Range Company, Portsmouth, Ohio, has appointed Hibbs & Fleming, Los Angeles, California, as its representative on the Pacific Coast in the distribution of the Model Steel Ranges.

Robt. G. Bryan, formerly with the Portsmouth Stove & Range Co., of Portsmouth, Ohio, has recently associated himself with the Advance Stove Works, of Evansville, Indiana, and was calling on the Chicago trade this week.

The work of excavating for buildings on the site of the United States Steel Corporation's new plant has been begun at New Duluth, Minnesota. Contractors have leased twenty houses there and are putting them in shape for their workmen.

The A. J. Lindemann & Hoverson Company, Milwaukee, Wisconsin, manufacturers of stoves, furnaces, etc., have increased their capital stock from $400,000 to $500,000, of which $100,000 is to be preferred and receive an annual dividend of not exceeding 7 per cent.

Active exploration of a new Cuban deposit of iron ore, it is reported, has brought to light above 500,000,000 tons, which would add 5 per cent to the figure representing the world's total iron ore supply, as published last year in a report of the Swedish government experts.

A dispatch from Evansville, Ind., September 4, said: "Over 175 iron molders went on strike here to-day because of an order issued at the five stove foundries preventing the drinking of beer on the premises during the noon hour." The new order evidently touched them in a tender spot.

The National Stove Co., of Lorain, O., whose plant was destroyed by fire several months ago, has begun the work of reconstruction. The new plant will consist of a main two-story brick building, 60x450 feet, and a brick fireproof power building, 50x63 feet. The entire plant has been planned to be absolutely fireproof.

The stove trimmings made by the Troy Nickel Works of Albany, New York, are marketed under the name "Alaska" in token of their construction for the comfort and convenience of the housekeeper. They are cool to handle and made of the best material to last. The "Alaska" line includes shovels, pokers, lid lifters and malleable stove fittings of all kinds.

The new catalogue for 1907-1908 of the Quincy Stove Manufacturing Company of Quincy, Illinois, just received, has unusual merit from the typographical standpoint. It contains 120 pages, is printed on super-calendered paper, which brings out the illustrations to great advantage, and is bound in heavy blue paper covers, printed and embossed in silver and black.

A business man in the Canadian Northwest has requested the American consul at the place in question to put him in communication with dealers in scrap iron, as he deals largely in metals and is in the market for at least 5,000 tons of scrap iron at this time. The name and address can be secured from the Bureau of Manufactures, Washington, D. C. Mention File No 1342.

The iron production of Alabama for the first six months of the year was 861,771 tons, an increase over the same period in 1906 of 36,681 tons. The production by months was as follows: January, 166,495 tons; February, 126,642 tons; March, 142,274 tons; April, 142,274 tons; May, 151,454 tons; June, 132,276 tons. The July production was 138,751 tons. It is hoped to bring the production for the year up to 1,800,000 tons with the new furnaces coming in.

Upon the petition of the Norton Coal Co., Judge Skeen in the United States district court at Bristol, Virginia, September 4, appointed Colonel L. C. Petitt of Big Stone Gap, Virginia, receiver for the Union Iron & Steel Co., a Delaware corporation, owning furnaces and manufacturing operations in Virginia, Alabama, Colorado, Ohio and Michigan. Edward L. Harper of New York, vice-president and general manager of the Union Iron & Steel Co., has enjoyed a sensational career, his attempt to corner the wheat market in Chicago and several of his financial undertakings having furnished interesting material for newspaper writers for several years.

RENOWN STOVES AND RANGES.

The Independent Stove Company of Detroit, Michigan, has recently issued a new catalogue illustrating and describing their line of Renown Stoves and Ranges. It is neat and artistic in typographical appearance, the cuts being especially attractive.

Certain features of the Renown line are claimed to be entirely new and original with the makers. One of these is the Renown Heat Economizer, which is a device for retaining the heat in the upper part of the oven when opening the oven door and also prevents the heat from rushing into the face of the operator.

Another new feature is found in the Renown Oak Stove, in which the makers have placed a five-inch ornamented cast iron band above the fire pot, to prevent the weakest part of the steel body from being burned out. This is not in the nature of an inside lining, but forms part of the body of the stove.

These two new features were first brought to the attention of the trade by the publication of the new catalogue. A copy will be sent to any dealer on re-

quest. When writing for same kindly mention THE AMERICAN ARTISAN.

DANGER IN GAS HEATERS?

Under the heading, "Death Danger in Heaters," the Chicago Tribune of September 5 contained the following:

After several unsatisfactory inquests upon the bodies of persons found dead in bath tubs, in which verdict of death by asphyxiation or heart failure were returned, Coroner Peter Hoffman and his medical chief, Dr. O. W. Lewke, are making a systematic study of the possibility of harmful and even fatal effects resulting from the use of hot water heaters used in small, unventilated rooms.

Both officials were annoyed that exaggerated reports had announced a definite conclusion of the discovery of a "new poisonous gas" which was the cause of scores of deaths, but they admitted their experiments had convinced them that many of the so-called "bath tub deaths" are due to nothing more than the exhaustion of the oxygen and the presence of the products of combustion resulting from the burning of a large gas flame in cramped quarters where there is no supply of fresh air.

ANIMALS DIE IN SMALL ROOM.

The last case which aroused the suspicions of the coroner was the death of Fred Merker, 253 Seminary avenue. A large gas burner was running under an "instantaneous" coil heater in the room when the body was discovered, and it was selected as an excellent opportunity for experiment. Tests with live animals, guinea pigs, and rabbits were made, and it was found that while they could live indefinitely in the room when the heater was extinguished, they were suffocated if it were allowed to burn any length of time while the windows and doors were closed.

The inquiry is not aimed at any individual make of heater or even at water heaters alone. Coroner Hoffman stated that the same results might come from the use of several burners of a gas range without ventilation.

UPHOLDS CORONER'S THEORY.

One of the best informed gas men in Chicago, E. G. Cowdery, vice-president and general manager of the People's Gas Light and Coke Company, admitted that the theory adopted by the coroner was correct in its essentials.

"It is one of the primary principles of science," he said, "that fire destroys oxygen, and if a candle is kept in a confined space any length of time will extinguish itself. That is the basic principle of this theory. Another cause of the deterioration of the air is the presence of the products of combustion. This is no great discovery, as the rule has been accepted generally for some time by our employes that no heater should be installed under such conditions as surrounded the death of Merker. They must find some ventilating flue as supposed to have caused Merker's death was in daily use for seven years without accident it could not be known as a before they put such a burner in a small room."

Mr. Cowdery also pointed out that as the heater which "deadly peril."

The importance of the question raised by the Chicago coroner and his medical adviser is evident at a glance. The public may require education in the use of gas heating devices in cramped and ill-ventilated quarters and THE AMERICAN ARTISAN will gladly publish the views and suggestions of its readers upon this interesting subject.

PEERLESS IRON ENAMEL.

One of the products of the Nickel Plate Stove Polish Company of Chicago is Peerless Iron Enamel, which is claimed to give a brilliant jet black enamel that never wears off and to be the best air drying iron enamel made. It comes in large ten ounce cans and stove men are invited to try a one-dozen case from their jobbers. If the jobber does not carry it in stock address the manufacturers and kindly mention THE AMERICAN ARTISAN.

THE WILLARD STEEL RANGE.

For an up-to-date steel range, which is claimed to be, not a cheap range, but of good honest quality at a low price, attention is called by Wm. G. Willard of St. Louis, Missouri, to the Willard Steel Range, which he says will make any range business boom with profit to the dealer.

The Willard proposition is claimed to be the most profitable ever offered to the stove dealer, and the range is described, not only as possessing durability, but as a fuel saver that will satisfy the purchaser.

The dealer's own name plate is placed on ranges when orders of ten or more are received. For further particulars address Wm. G. Willard, Room 28, Willard building, 316 Chestnut street, St. Louis, Missouri. When writing, kindly mention THE AMERICAN ARTISAN.

UNCLE SAM DAMPERS.

The Sayre Stamping Company of Sayre, Pennsylvania, offer to send a free sample of their "Uncle Sam" Damper to any dealer in heating apparatus in the confident belief that there is nothing better on the market. The damper is described as light, easily adjustable and enduring, the plate being stamped from best nickel steel and corrugated to prevent warping. The stem consists of forged steel, sharply pointed, notched to engage edge of plate, and is held absolutely in place. When sending to the Sayre Stamping Company for the free sample offered, kindly mention THE AMERICAN ARTISAN.

TO LESSEN FIRE LOSSES.

Thomas M. Purtell, fire marshal of Wisconsin, an office which was recently created, has started a campaign for the purpose of lessening fire losses which result through "overheated stoves" and "defective flues," these terms being misnomers, according to the fire marshal.

Mr. Purtell says that all fires, such as are started by incendiaries, and such as are communicated from other buildings, are the result of carelessness. He thinks that in Wisconsin alone nearly $500,000 would be saved every winter season if the head of every house in the state would give just 20 minutes a month to looking after his stoves and flues.

After defining terms such as "adjoining fires," the state fire marshal continues:

" 'Overheated stoves' is not a satisfactory statement of the cause of a fire. If the floor and wall near the kitchen stove were protected, and needed repairs made on stoves and flues before the first cold wave of winter, the saving would be great."

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 40 to 45 inclusive.

H. Bondegard has sold his hardware business in Phillips, Nebraska, to H. Arnett.

John W. Cook has succeeded to the hardware business of Rood & Cook in Fulton, Missouri.

J. S. Fryer & Co. have sold their stock of hardware, etc., in Barnston, Nebraska, to Burket & Dean.

Johnston, Ogle & Co. have bought the hardware business of J. T. Ireland & Co. in King City, Missouri.

Hartwell Bros. are having a new factory building erected at Delphos, Ohio, to be used for the manufacture of axe and shovel handles.

The hardware store of Tucker, Sharp & Co. at San Augustine, Texas, was destroyed by fire August 19. Loss about $18,000; insurance, $12,000.

M. J. Tully has bought the interest of his partner in the Gislason Hardware Company, St. Peter, Minnesota, and will conduct the business in his own name.

The American Steel & Wire Company have given notice of an advance in their prices of 5 cents per 100 pounds on miscellaneous wire from September 3d.

The Hardware Supply Company of Grand Rapids, Michigan, closed its plant August 24, when the annual picnic of the employes was held at Fruitport, Michigan.

The Springman building at the corner of Austin and Proctor streets, Port Arthur, Texas, occupied by the Starns Hardware Co. and others was damaged by fire August 27 to the extent of $17,000.

J. H. Jelly of Mitchell, S. D., has bought a hardware and furniture store at Alexandria, S. D. He has been for some years a general distributing agent for The J. I. Case Threshing Machine Co. of Racine, Wis.

Johnson Lawrence of Polo, Illinois, has purchased the Angraves hardware stock at Sterling, Illinois, and the Argraves hardware stock at Sterling, Illinois, and was formerly associated with Mr. Argraves, will have charge.

The Gilbert & Bennett Mfg. Co., Wireton, Ill., manufacturers of wire goods, are erecting several additional buildings, including blacksmith shop, a pattern shop and a cleaning house, all one story, of mill and brick construction.

The Bailey-Spencer Hardware Company has been incorporated at Lynchburg, Virginia. J. W. Bailey, president; W. S. Bell, secretary and treasurer; J. Y. Spencer, J. W. Lupton, all of Lynchburg. Capital, maximum, $50,000; minimum, $30,000.

The American Wire Cloth Company has been incorporated with office at 414-415 Prudential Building, Newark, New Jersey. John Campbell, Jr., is president. The company will take over the business of J. Campbell, Jr., formerly conducted at 226 Verona avenue, Newark.

The American Tri-Metallic Paint Company has about completed its new plant at Alton Park, near Chattanooga, Tennessee, and will begin making paint immediately. The company owns ore deposits at Scottsboro, Alabama, which will furnish part of its material. W. Walter Doty is president.

The Globe Screw Company of Hartford, Conn., has been incorporated; capital stock $5,000. The incorporators are Robert G. Henry, William G. Allen and Daniel M. Wright, all of Hartford. Mr. Henry is president and Mr. Wright is secretary and treasurer of the Henry & Wright Manufacturing Company.

The Frank P. Hall Company of Columbus, Ohio, wholesale and retail hardware, has acquired the stock and store of Elliott & Harris of that city, and will consolidate the two stocks in the store of the latter concern at 115 South High street. Messrs. E. L. Harris and H. L. Fillmore of Elliott & Harris continue with the Frank P. Hall Company.

The Reading Hardware Co. of Reading, Pa., has begun the manufacture of lawn mowers in the building at Third and Buttonwood streets, formerly occupied as a tack factory by Rick Bros. This building stood idle for years until recently, when the work of equipping it with machinery, etc., was begun. The building was remodeled and some additions made.

The Victor Mfg. Co., manufacturers of washers and wringers, have removed their washing machine factory from Hiawatha, Kansas, to Leavenworth, Kansas, where they report they have greatly increased facilities for the manufacture of their product, having purchased the large factory and building of the National Linseed Oil Co. and remodeled it, making it an up-to-date factory for their use.

The annual outing of the St. Louis Hardware and Stove Dealers' Association was held at Forest Park Highlands August 21. It was largely attended, in spite of threatening weather. Among the hardware men present were: William H. Hahn, S. A. Pauly, R. H. Myers, George Rissie, August Steinmeyer, F. D. Kansteiner, Henry Ammon, Theodore Wirtz, Senator Weber, Ed L. Wachter and John May.

The Penn Hardware Company of Reading, Pennsylvania, manufacturers of builders' hardware, etc., are making considerable additions to their plant at the foot of Spruce street, Reading. The latest addition will be a modern factory building, 60 by 100 feet, six stories high, which will complete a group of buildings from the Schuylkill Canal to Water street, with a single stretch 354 feet long and 60 feet wide. In the new building the company expect to employ 150 to 200 additional hands, making over 1,000 employes in the entire plant.

J. C. Maloney, a Chicago sales agent for the National Cash Register Company of Dayton, Ohio, has invented and patented what he calls the "U & I Check Indicator and Checking System" for restaurants, lunchrooms, etc., and proposes to sell the same through the hardware trade. The device is a small locking metal box to be fastened opposite every individual seat at lunch counters, etc., and is intended to prevent fraud on the part of customers and also collusion between customers and waiters. A company with a capital stock of $100,000 is being organized to manufacture and market the device, which is understood to

have found favor with leading restaurant people in New York and Chicago.

The Philadelphia Record of August 23 said: "In pointing to 70 years of unbroken individual ownership the Biddle Hardware Company takes pardonable pride. This concern, which does a jobbing business in hardware, is located at Nos. 513, 515 and 517 Commerce street, Philadelphia, and Nos. 516 and 518 Cuthbert street. In spite of its apparently corporate name it is a private firm. Three generations make rather an unusual record for an American business house, but that is the case with the Biddle Company. Robert M. Biddle founded the house in 1837 and died in 1902. His son, Charles M. Biddle, and his grandsons, Charles M. Biddle, Jr., and Robert Biddle, 2d, together with Edward Knight, make up the present members of the firm, which is one of the best known of its kind in the city."

Sealed proposals will be received until September 25, 1907, by the Isthmian Canal Commission, Washington, D. C., for the supplying of steam shovels, steam churn drills, air-compressor plant, including air compressors, air receivers, boilers, steel stack, smoke box, pumps, condenser, feed-water heater, oil separator, header, valves and fittings, tandem compound engine and 100-kilowatt generator, induction motors, transformers, rock drills and equipment, steel rails, splice bars, tie plates, track bolts and spikes, frogs, switches, switch stands, steel, iron, rivets, wrought-iron pipe, drill bitts, machinist's hand taps, clamp screws, snatch blocks, molder's bellows, melting ladles, safes, steam whistles, steam traps, wheelbarrows, water coolers, rubber sleeves for suction dredge, canvas belting, manila rope, boiler compound, red lead, borax, cross-ties, piles, lumber, etc.

The Buffalo, New York, Times of August 25 contained the following: "One of the best known and most popular of Buffalo's substantial and successful business men, as well as one of her ablest and most valued public officials, is Hon. Charles J. Fix, treasurer of Erie county. He is a native son of this city, having been born in the old Seventh ward at 967 Michigan street. He was educated in St. Louis schools, after which he learned the trade of printer in the office of the Courier and Evening Post. He worked at his trade until 1882, when he embarked in the hardware business. In 1892 he started his present store at 808 Main street, where he built up a large and high-class business. His store is one of the most attractive in its appointments and is stocked with every description of light and heavy, shelf, house and builders' hardware."

The Brock & Beard Company has been incorporated at Lexington, Kentucky, as the result of the consolidation of Brock & Co., and the Payne & Beard Company. The two concerns have been doing business on West Main street within three doors of each other. The members of the Brock & Beard Company are Messrs. W. B. Brock, Lafe Brock and J. W. Beard. Mr. Beard is president of the new corporation, while W. B. Brock is vice-president and Lafe Brock secretary and treasurer. Mr. Beard, who is known throughout central Kentucky as an expert roofing and cornice man, will have charge of all the outside work, while Lafe Brock, who has had active charge of the conduct of affairs of Brock & Co., will look after the inside work and have the stove and hardware departments under his supervision. The new concern will occupy the premises of the Payne & Beard Co.

A FINE CATALOGUE.

The American Axe & Tool Company of Glassport, Pennsylvania, have just issued a catalogue of their products which is a splendid specimen of the catalogue maker's art. The aim of the company in the compilation of the catalogue has been to make it a reference book replete with information pertaining to their line. They have endeavored to carefully illustrate the different patterns of tools made, to show their popular finishes, and to give the standard lists, precise measurements, weights, etc.

The illustrations in the catalogue, which is printed on very heavy paper and contains 270 pages, are of surpassing merit. The art of the color printer has been exhausted apparently to reproduce in facsimile the products of the company and the result is most pleasing to the eye and to the appreciative sense. But the illustrations, the company insist, while bearing evidence that they duly appreciate the importance of attractive finishes, should not cause the main feature of their tools to be lost sight of—and that paramount feature, they say, is quality. This they strive to maintain, according to the preface of the catalogue, by the installation of new methods from time to time, in the endeavor to attain greater efficiency in producing tools that are perfect in every detail.

When writing the American Axe & Tool Company with reference to the new catalogue, kindly mention THE AMERICAN ARTISAN.

A "PRISCO" WEDDING.

Mr. Albert Pritchard of the Pritchard-Strong Co., 25 Circle street, Rochester, New York, was married in Chicago, September 3d, to a charming and popular clubwoman, Mrs. Paulina Harriette Lyon. The ceremony was performed by the bride's father, the Rev. Wm. Putnam of Lansing, Michigan, state chaplain of the Michigan G. A. R.

Mr. and Mrs. Pritchard will travel for six weeks and will then settle down in Rochester. Mr. Pritchard is widely recognized as the practical man of the Pritchard-Strong Co., and having successfully evolved such household conveniences as the "Prisco" Sink Strainer and the "Prisco" Bread Mixer, it is confidently expected that with added inspiration he will produce in future many more useful and valuable household specialties. The sincere congratulations and best wishes of THE AMERICAN ARTISAN are tendered to him and his charming bride.

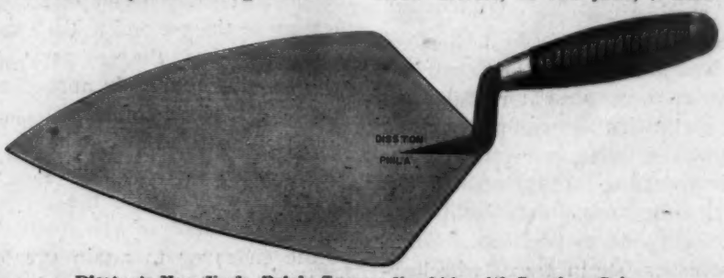
ELECTRIC FLASHLIGHTS.

Many uses are now found for electric flashlights on account of their convenience and readiness of operation. They are used in stores, factories, on the road, and in fact in all dark places, and are manufactured in forms that are suitable for every possible purpose.

The Manhattan Electrical Supply Company of 17 Park place, New York, and 188 Fifth avenue, Chicago, call attention to their "Eureka" Searchlight, 1½x9 inches in size, with metal case, soft leatherette covering and silver-plated reflector. One battery, it is claimed, will illuminate the lamp several thousand times. Every lamp is tested before leaving the factory and is guaranteed. The Eureka retails at seventy-five cents and is reported to be a ready seller. Dealers are invited to write the Manhattan Electric Supply Company, for prices on these and other sizes, also on dry batteries, bells and other electric supplies. Address the nearest house, either New York or Chicago, as above, asking for catalogue No. 22H, and kindly mention THE AMERICAN ARTISAN.

DISSTON BRICK TROWELS.

The New York Brick Trowels, manufactured by Henry Disston & Sons, Inc., at their Keystone Saw, Tool, Steel and File Works, Philadelphia, are described as made with extra quality crucible cast steel blade carefully hardened and tempered and ground to a true taper, the "lift" or hang of the handle being just right.



Disston's New York Brick Trowel No. 111, with Leather Grip.

A catalogue describing the Disston Trowels and other tools manufactured by the company will be sent on request. When writing Henry Disston & Sons kindly mention THE AMERICAN ARTISAN.

STEVENS' NEW NO. 80 RIFLE.

One of the recent products of the J. Stevens Arms & Tool Company, which bids fair to sustain the high reputation of the manufacturers, is their No. 80 Repeating Gallery Rifle, which is illustrated on this page. The company state that not within their recollection has a new rifle been placed on the market that gave such universal satisfaction as has this new repeater. In the case of most new rifles, radical changes are frequently made in the construction after the public has found the weakest points, but only a few slight changes will be made from the original model of the Stevens No. 80 Repeater, as shown in the cut, such as supplying a rubber butt plate instead of an aluminum, a plain trigger guard, and reinforcing the tip of the forearm to prevent any possibility of its checking.

New Stevens No. 80 Repeating Gallery Rifle.

The demand for this rifle is said to have been unprecedented, while the repeat orders that are being received indicate that it is giving most perfect satisfaction.

A change of the stop when the magazine is empty enables the rifle to handle either 22 short, 22 long, 22 long rifle or 22 Stevens-Pope Armory cartridges.

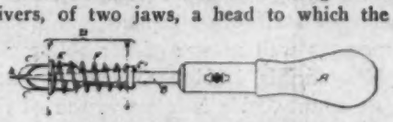
For further particulars, prices, etc., address J. Stevens Arms & Tool Company, Chicopee Falls, Massachusetts, and when writing kindly mention THE AMERICAN ARTISAN.

SCREW-HOLDER FOR DRIVERS.

A patent, No. 864633, has been granted to Thomas J. Fegley and George O. Leopold, and by them assigned to North Bros. Manufacturing Company of Philadelphia, Pa., for a device described as a screw-holder for drivers. The official drawing is reproduced herewith, and the first of the claims allowed are as follows:

1. The combination in a screw-holding attachment for screw drivers, of two jaws, a head to which the jaws are attached, an abutment disk having guides for the jaws, said jaws being shaped so as to be moved apart when the head is moved towards the disk, and a spring for separating the head from the disk, substantially as described.

2. The combination in a screw-holding attachment for screw drivers, of two jaws, a head to which the jaws are attached, an abutment disk slotted to allow for the passage of the jaws, said jaws being shaped so that when the head is moved towards the disk they will be separated and when moved away from the disk they will be drawn together, with a spring tending to force the head away from the disk, both the head and the disk being perforated for the passage of the shank of the screw driver, and the disk being so shaped as to engage the wide portion of the shank, substantially as described.



New Patent Screw-Holder for Drivers.

PERFORATED METALS.

The use of perforated metal is being extended very widely and it is now used for many purposes to which it was a stranger a few years ago. The Harrington & King Perforating Company, of Chicago and

New York, are manufacturers of perforated metals of every description for all purposes and for screens of all kinds. Detailed information of their products will be sent to any hardware dealer on request and those who are not familiar with the numerous purposes to which perforated metal is now applied will find the company's catalogue something in the nature of an eye-opener.

The main office and works of the Harrington & King Perforated Company are at 212 North Union street, Chicago, and they have a New York branch at 114 Liberty street. When writing them regarding their line of perforated metals kindly mention THE AMERICAN ARTISAN.

A "PRISCO" LANTERN WINDOW.

In the contest recently conducted by the Pritchard-Strong Company of Rochester, New York, the competitors were required to make a window display of the "Prisco" lanterns manufactured by the company, with the figure of their "Uncle Obadiah" in connection therewith. One of the prize winners was Mr. E. B. Standart of Holland, Michigan, whose winning display is reproduced herewith. Mr. Standart described his window as follows:

"We have the lantern as shown, lighted and turned up to the ordinary height, and an electric fan making 7,000 revolutions a minute, blowing directly on the holes in the bottom of the globe, showing how utterly impossible it is to blow the lantern out. My idea was to bring out forcibly the point that every retailer with hardly an exception tries to demonstrate, that the lantern cannot be blown out with any ordinary wind. I do not believe a customer comes into my store that does not ask this question, and in selling the lantern we usually light it and place it in front of an electric fan, showing that it is impossible to blow it out."

Prize Winning Display of Prisco Lanterns by E. B. Standart, Holland, Mich.

ADVERTISING "ENTERPRISE" SPECIALTIES.

Someone has said that the hand that rocks the cradle rules the world, and it is the same hand that holds the purse. However that may be, the man with home goods to sell who does not study the ways of women and cater to their desires is far off the straight road to success. A successful retailer must know what women want, and what they are going to want next.

A careful study of home needs lies behind the little book illustrated herewith, which is reported to have been a tremendous educational force for The Enterprise Mfg. Co. of Pa., who have used successive editions as a compliment to their women customers and as an advertising medium, until, it is said, over 3,000,000 copies have been distributed, by mail and through the retail hardware dealer.

The sixth edition of this book, revised and improved is now being distributed. It includes a lot of famous old recipes which all housekeepers value because of their simplicity, economy and goodness, and also a selected collection of newer recipes, all tested and proved right. It contains in addition descriptions of the household Enterprise Meat and Food Choppers, Sausage Stuffers and Lard Pressers, Coffee Mills, Fruit, Wine and Jelly Presses, Sad Irons, etc. When imprinted with the business card of the dealer this book advertises his store for years. Dealers who desire to increase

their sales of "Enterprise" specialties should communicate with the advertising department of the Enterprise Mfg. Co. of Pa., Philadelphia, and secure copies of the book for distribution. When writing kindly mention THE AMERICAN ARTISAN.

THE PROSPEROUS LOOKING STORE.

Doesn't your front need brightening up?

Wouldn't a coat of enamel, stain or paint make your counters, shelves, walls and ceilings inside more inviting?

How does your window look?

Does the passer-by get a good or bad impression from it?

Do you change it often and make it interesting?

Does it drive away the "blues" or does it create "that tired feeling" when your friends and customers see it?

Does your window advertise you or does it drive trade to your competitor?

Which of these two classes are you in? asks the Bureau of Promotion and Development of the Paint Manufacturers' Association, in a recent letter to paint dealers.

Which one would YOU prefer to trade in?

Make your store appear so "wide awake," so up-to-date, so bright and attractive, that if you were the man you wish to influence you would just naturally consider it "headquarters" for paints. Give it that "know-your-business" air that counts with live people.

You could not hire the service your show window will give you for the price of the clerks if you use it right.

OBITUARY.

Frank Emerson Reed.

Frank Emerson Reed died at Camp Harvard, Lake Geneva, Ill., Tuesday afternoon, September 3. He was the Chicago manager of the Patterson-Sargent Company, paint manufacturers of Cleveland, Ohio. He was born in Toronto forty-six years ago, but had been a resident of Chicago for thirty years. He was a member of the Chicago Athletic association, the South Shore Country club, the Hinsdale Golf club, and several commercial organizations. He is survived by a widow and three children.

Allen Rogers.

Allen Rogers of Moorestown, N. J., died in the Pennsylvania Hospital, Philadelphia, from complications following an injury to his hip in a runaway accident. On August 21 Mr. Rogers was driving a spirited horse in Mt. Pocono. It ran away and Mr. Rogers was thrown out, his hip being broken. He conducted a hardware business at 135 Market street, Philadelphia, and was 63 years old. A widow and son survive him.

William H. Whitney.

William H. Whitney, member of the firm of Roger, Whitney Co. of Westfield, Mass., hardware dealers, was found dead in his room at the Cheshire House, Keene, N. H., August 21. Mr. Whitney was about 68 years of age. Death is believed to have resulted from heart disease.

RETAIL HARDWARE DOINGS.

NEW FIRMS AND INCORPORATIONS.

Freeport, Illinois—Joseph Grant and Henry Luedeking have purchased the stock for a new hardware store.

Canyon, Texas—Thompson Hardware Company, incorporated with a capital stock of $25,000.

St. Louis, Missouri—Manchester Hardware Company, incorporated with a capital stock of $5,000.

BUSINESS CHANGES.

Norman, Oklahoma—Tony Nolan and O. J. Martin have purchased the Carey-Lombard Hardware Company.

Red Cloud, Nebraska—J. O. Butler has sold his stock of hardware to R. E. Counce and Charles Bailey.

Worthington, Iowa—Keve Lumber Company has bought S. Jaeger's hardware store.

Pontiac, Michigan—City Treasurer E. H. Fay and C. G. Freeman have purchased the hardware business of Beattie & MacCallum.

MISCELLANEOUS.

Bath, Illinois—L. G. Mathews has purchased a hardware store at Rushville.

Montreal, Canada—Damage to the amount of $25,000 by fire was caused to the hardware store of Caverhill, Learmont & Company.

Baraboo, Wisconsin—The hardware store of Lee Radke & Company was burglarized.

Exeter, Nebraska—Fire destroyed the hardware store of William F. Dickinson.

Reynolds, Indiana—Fire destroyed Phillips' hardware store.

Ithaca, New York—Masters & Son will move their hardware business into the quarters formerly occupied by the Savoy theater.

Davenport, Iowa—Lightning struck the building in which Fred Alstrand and Herbert Bothwell had an implement and hardware store.

Neodesha, Kansas—The hardware store of Lines Bros. was entered by burglars.

Beatrice, Nebraska—A small loss by fire was caused to the hardware store of D. A. Lascher.

Skowhegan, Maine—The Blunt Hardware Company has leased one of the stores in the Merrill block and will move in a short time.

San Augustine, Texas—Tucker & Short, hardware, had a $20,000 loss by fire; insurance $12,000.

Cooksville, Illinois—J. F. Lynch and brother have bought a hardware and implement stock here and will run it in connection with their Chillicothe house.

Alton, New York—The hardware store of E. J. Gatchell was destroyed by fire.

Cedar Falls, Iowa—George Sheerer & Company's hardware store was damaged by fire due to an explosion.

Paducah, Kentucky—Scott Hardware Company and L. F. Henneberger Hardware Company have suffered a loss due to fire.

Passaic, New Jersey—Forsyth Hardware Company, 356 Passaic street, was placed in the hands of a receiver.

Champaign, Illinois—Burglars entered the hardware store of T. H. Trevett and got away with more than $100 worth of goods.

Chicago, Illinois—Orr & Lockett's hardware store was entered by a burglar and several hundred dollars' worth of revolvers taken.

TO BRAZE CAST IRON.

To braze cast iron take 1 lb. borácic acid, 4 oz. pulverized chlorate of potash, 3 oz. carbonate of iron, 2 lb. fine brass spelter. Mix well. Heat casting to a brazing heat before applying. Then lay on liberally and work it along the break with an iron rod flattened on the end. Use a gas, gasoline or coke fire, but do not use coal.—Popular Mechanics.

Advertising Department

Our readers are invited to send in copies of their advertisements in the local press for criticism. All communications should be addressed to the "Advertising Department" of THE AMERICAN ARTISAN.

In the advertisement of Norby & With of Port Townsend, Washington, which appeared originally in the Daily Call of that town, and is here slightly reduced, we find a style of advertising of questionable merit.

This advertisement may have pulled business for Norby & With, but the majority of stove men have

The Range Question

It can best be settled by consulting with the firm of Norby & With, sellers of the best line of Ranges ever introduced here.

DON'T BUY A RANGE

Without first seeing and pricing those being sold by

NORBY & WITH--Union Wharf

Plumbers, Sheet Metal Workers

found that it pays, when advertising stoves and ranges, to use an illustration of their line to attract the attention of prospective stove buyers. Such an illustration need not occupy much space, but it gives a distinctive character to the advertisement and nails the attention of readers who are in the market for a stove.

* * *

The history of successful advertisers is a history of steady and continuous advertisers.—Jewelers' Circular-Weekly.

* * *

Huff & Company, hardware dealers of Bremen, Indiana, send us a copy of a large illustrated circular announcing their annual stove sale, with a request for criticism thereof. It has been the custom of this firm for a number of years to have a special annual exhibition and sale of stoves and ranges. This sale is held early in September and inducements are offered to the patrons of the firm to buy their stoves early in the season. A full-page advertisement is inserted in the weekly newspaper at Bremen and this advertisement is then reprinted in the form of a circular, which is placed in every residence in the county.

The circular is of such a size that it is impracticable to reproduce it on this page in such form as to show all its merits, but we show in reduced form the introduction to the advertisement, the remainder being devoted to illustrations of the various stoves and ranges handled by the company, with interesting reading matter concerning them and prices, etc.

We have nothing but words of praise for this advertisement of Huff & Company. It is based on good judgment and demonstrates that the firm is alive to the possibilities of judicious advertising. The matter and make-up of the advertisement are highly commendable and it reproduces well in circular form. It would hardly need the assurance we have from Huff & Company that their annual stove sales are red-letter days in the history of the store to convince us that their advertisement is effective, for it has the pulling quality beyond a doubt.

We would not say that an advertisement like this makes a housekeeper buy a stove whether she wants one or not, but it is certain that such advertising will convince anyone in the county that Huff & Company's store is the place to buy stoves.

We like especially the company's guarantee. "Our stoves are fully guaranteed" is a good line in the ad., and plainly marks the difference between the home store and the mail order house. The latter does not guarantee anything.

Huff & Company ask for criticism and we cheerfully extend it—in the form of congratulations.

We would suggest, however, that their name line might have been set in heavier type. As it is, it is a little out of proportion to the rest of the ad.

OUR ANNUAL STOVE SALE

IT has been the custom of this store for a number of years to have a SPECIAL EXHIBITION AND SALE OF STOVES AND RANGES, giving our patrons extraordinary inducements to buy their stoves early in the season, thereby avoiding delays in shipment and giving them a choice of a larger line of samples than we would have floor space to carry through the season. These sales heretofore have been red letter days in the history of the store and money saving events for the customer. This year we are making a special effort to show a larger line of samples and to show you greater bargains in Cook Stoves, Ranges and Wood and Coal Heating Stoves. We have set the week beginning

MONDAY, SEP. 9 TO SATURDAY, SEP. 14

for this special sale. During this week's sale, besides giving you extremely low prices on stoves and ranges we furnish you the following present with each purchase:

With Each Steel Range a Set of Kitchen Utensils, Amounting to $7.00.

WITH EVERY CAST RANGE OR COOK STOVE A SET OF UTENSILS, YOUR CHOICE FROM STOCK, WORTH $4.00.

A HANDSOME AND USEFUL PRESENT with every HARD COAL OR WOOD HEATING STOVE--These Utensils with the Special Price on the Stove save you at least

25 PER CENT ON THE OUTFIT.

Our Stoves are Fully Guaranteed--Hundreds of satisfied customers testify to their quality. Ask the proud housewife, the happy owner of one of our stoves or ranges. She is our best advertisement.

HUFF & COMPANY, BREMEN, INDIANA.

* * *

"To neglect to advertise is like resolving never to travel by steam or communicate by telegraph."—Horace Greeley.

BUSINESS ETIQUETTE.

BY JOHN A. HOWLAND.

We are charged—and perhaps chargeable in the present age of business with too little regard for the small details of deportment in our business relations. Woman's invasion of the field of the workers has given rise to much of this in the past. But having quieted comment in this quarter, rather than settling the question for all time, that other general question comes up again. Are the amenities of social contact sufficiently preserved in the domain of business in its general lines?

Unquestionably the answer is, No. At the same time the matter of this settlement on a comprehensive general scale involves so many incidental and individual factors in business and community relations that in all probability man never will be able for the solution of the matter.

Deportment in its last analysis is a fictitious, artificial disguise. Considering etiquette in its fullest sense, its place in all human relations is one with the proposed universal language of Volapuk, which long ago sank into oblivion. Volapuk was suggested and partly designed and executed as a conglomerate language which should serve any race whose spoken and written speech should be incorporated in it. If ten distinct languages had been merged into it, the proposition was that anyone speaking any one of the ten languages at once could make himself understood in written and spoken speech by any one or all representatives of the other nine languages.

But however coldly Volapuk was received and let die of inanition, etiquette in its broad lines is preserved as a limited common ground for all the civilized great nations. International diplomacy has done much to make and preserve this economical factor. To-day a representative from ten nations, having no spoken word in common, might meet at table without one giving offense to another in table manners. Why, then, should a single nation within itself present its own impossible tangles of deportment in business and community relations?

Deportment is etiquette in all its surface essentials. Lack of unwritten deportment makes it possible for the individual attempt to conform to it to bring about a laugh at the expense of the conformist, or on the other hand to land the nonconformist on his head in the street. One has been guilty of too much and the other guilty of too little, but according to the judgment based in an unwritten law both are made to suffer.

Nationally an unwritten law asks of the citizen that he remove his hat when the band plays "The Star Spangled Banner." At the same time no man with an ancestry buried south of Mason & Dixon's line takes kindly to the invitation. He has no objection to the music as a national air—no more than his northern brother to the music of "Dixie" when that northern brother claps and shouts his appreciation of "Dixie's" stirring syncopations. But the southerner remembers first the words of the national air, and they are not words to command an obeisance forty years after they have become nationally in bad taste. Yet there are instances enough where a written law has been broken by assault upon the person who for one reason or another has failed to obey this unwritten law of deportment! Under this evidence shall even Business rule that deportment is not vital in community life?

But how oddly deportment about the hat obtains! Naturally, the typical American is not disposed to remove his hat without sufficient cause. At his business office desk he is disposed to keep his hat on his head and his cigar in his mouth—perhaps a foot on the table, too—when a chance woman caller comes in on a business quest. But somewhere in Chicago at least some ethical authority, unknown and failing to put his ethics of the hat in written form, is seeking to establish in public memory even certain buildings in which elevator traffic the man's hat must come off his head in the presence of a single woman passenger. In these buildings he may keep his cigar in his mouth, but his hat must come off. Observation has shown, that the Fine Arts office building is one of the places; that Marshall Field's department store is another.

The truth is that a senseless, empty, sham etiquette is behind the hat removal in a public elevator anywhere. Given five or ten men in such an elevator, ready for the ascent, what right has anyone of these men to remark the appearance of any woman by the removal of his hat? He kept it on when he overtook her in the entrance door and passed her, perhaps rudely; he will put the hat on again when he steps into the corridor of his particular floor, where a score of women may need to be crowded aside in order that he shall pass; in any public conveyance moving laterally—even to the omnibus which may have brought him and ten women to the entrance of the building—the hat will never be removed. But in the elevators in these certain prescribed buildings he will take off his derby or straw hat and stand crowded to the point of crushing merely because one possibly embarrassed woman is in the car!

Originally the act of removing the hat was one of servility or of profound obeisance. There is no act of civilized man expressive of so much—or so little—as the uncovering of the head. But as between this much and this little of uncovering, there is a wide field of possibility in community deportment.

In business and community relations in general the office of the hat is not well adapted to the needs of the American citizen. If a woman be the private secretary in the entry office, it is a question of even tipping the hat as a preface to a question from the male caller is in good taste. There are offices—as in the reception room of a suite of physician's offices—where removal of the hat is generally accepted by the waiting layman. But in these offices, in scores of city buildings, the uncovered layman may pick out most of the waiting physician callers merely in the boorish refusal of the professional to remove his hat!

What is business and community etiquette? Define it in even general details and we shall be able to mark the boor or the ignorant. But until this consistent law is framed in written English only a real gentility may find itself capable of a consistent expression at all times and in all circumstances.

Heating and Ventilating

THAT BATHROOM HEATING PROBLEM.

To THE AMERICAN ARTISAN:

With reference to the problem presented by Colwell Bros., Syracuse, Indiana, who are about building an addition to a house, to be used as a bathroom, the size is not given, neither is it stated whether the floor is on a level with the main floor of the house. As the heat in the house is from stoves, it would be practicable to place a hot water attachment in a surface burning stove; place a hot water radiator, of proper size, in bathroom, and connect it to attachment to stove by supply and return pipes of suitable size. The supply pipe could run near the ceiling, and the return along on or under floor to stove.

This method would be satisfactory. Things to consider would be size of stove and bathroom, also pipe and radiators, and distance of stove from bathroom.

By using unions the stove could be removed in the spring of the year, if desired.

Yours very truly,

CHAS. SMITH.

Chicago, September 3, 1907.

CROWN WARM AIR FURNACES.

In calling attention to their "Low Down" Crown Warm Air Furnace, the March-Brownback Stove Company of Pottstown, Pennsylvania, show a shaded sectional cut of the furnace, intended to demonstrate the direction taken by the gases and warm air and also the thickness and staunchness of the various parts of the heater. The construction is designed to secure the greatest possible amount of radiation and the furnace is declared to give invariable satisfaction in operation and use.

A catalogue fully illustrating and describing the Crown Warm Air Furnace line will be sent by the manufacturers on request. When writing them kindly mention THE AMERICAN ARTISAN.

THE CENTURY WARM AIR FURNACE.

The new Century Warm Air Furnace now being marketed by The Forest City Foundry & Mfg. Co. of Cleveland, Ohio, has the very desirable feature of being low in height, and adapted for use in low cellars, while still maintaining ample elevation of warm air pipes. The furnace is described as easily cleaned and operated, and a detailed description of its particular features is as follows:

The radiator has triple radiating faces, furnishing a large area of effective heating surface and arranged to provide for the warming of an immense volume of air. The long revertible fire travel within radiator renders available the intense heat of the escaping products of combustion before they reach the smoke flue.

The large combustion chamber, formed by the radiator, is a special feature of these heaters, making possible a perfect combustion of gases and deriving the fullest benefits from the fuel consumed.

The feed door is double and unusually large, being designed to accommodate large chunks of wood, which fuel may be used with pronounced economy in this heater. Where coal is used as fuel the lower door only need be opened.

The fire pot is deep and made in sections. No ashes can accumulate upon the sides, which are nearly perpendicular. Connections are made in deep gas-tight cup joints, giving ample allowance for expansion and contraction.

All Century Furnaces are equipped with a dumping triangular bar grate, which can be dumped at ease or removed through the ash pit door if desired.

The 1908 catalogue describing the entire line of furnaces made by The Forest City Foundry & Mfg. Co. will be sent to any dealer on request. When writing kindly mention THE AMERICAN ARTISAN.

THE STANTON UPRIGHT STEEL.

The Stanton Heater Company of Martin's Ferry, Ohio, have been manufacturing steel furnaces for thirteen years and call particular attention to their Stanton Upright Steel, for hard and soft coal, slack or wood.

The company were among the first to place a steel furnace on the market and as pioneers in their manufacture claim that anyone favoring them with an order may rest assured that all material and workmanship will be first-class and that each furnace will embody the best principles known in furnace construction.

The radiating sheet or main drum of the Stanton Upright Steel is made of first quality American locomotive fire box steel, which is claimed to be a superior material to that used by others for similar purposes.

The Stanton Heater Company also manufacture the Stanton Seamless, the Stanton Natural Gas, and the X-Ra Cast Furnace. Separate descriptive catalogues of each furnace in the line will be sent to any dealer on application. When writing kindly mention THE AMERICAN ARTISAN.

STEEL CASING RINGS.

The Walworth Run Foundry Company, makers of fine gray iron castings and manufacturers of semi-steel registers, call the attention of the heating trade to their Steel Casing Rings, which they supply ready to use, in any size, to conform to individual requirements in every respect.

These rings are made with lugs for double casings, without lugs for single casings, in full circles for ordinary use, and in partial circles for full cast fronts. They are of the never-break variety and the circles are guaranteed perfect and always to exact circumference from the furnace man's own dimensions.

Those interested are invited to write for further particulars. Address The Walworth Run Foundry Company, 27th street S. W., Cleveland, Ohio. When writing kindly mention THE AMERICAN ARTISAN.

NEW ZEALAND HEATING SYSTEMS.

Consul-General William A. Prickitt of Auckland, assisted by the consular agents elsewhere in New Zealand, describes the methods of house and office heating used in that colony, with suggestions as to how the market for equipments in this line may be developed as follows:

"The deficiency of the open-fire system of heating in the city of Auckland, which, aside from the cooking stove, is about the only manner of heating in the whole of the Auckland province, is one of the first things that is manifest to an American who visits this city in the winter time, and he asks why do not the people make their houses and places of business comfortable when it could be done so easily. Open fires are delightful as auxiliaries, but as the main source of heat they are, as commonly used, wasteful and inefficient, a large percentage of the heat escaping through the chimney.

"New Zealand has an excellent climate, but at times it is very humid and the cold and dampness of winter should be dispelled by an up-to-date system of heating. In the Auckland province the thermometer is very seldom below the freezing point. In winter, from June to September, the temperature ranges from 32° to 60° F. There is often a succession of rainy days, followed by clear, cold, bracing weather. In the clear sunny days one finds the weather out of doors delightful, but in the house where a person wishes to sit down and be comfortable it is a different matter. The rainy days are very dreary, most of the house being chilly, damp and disagreeable. At the large hotels one finds open fires in the drawing and smoking rooms, but the corridors are cold and cheerless, and the dining-room very seldom has a fire in it. There is very little provision for heating public buildings. The churches have no means of being heated. The city chambers have a small open fire in each room where the public business is done, but the reading rooms at the public library are not heated at all.

"Having used the hot-water system in the United States, I think that it would be well adapted to the Auckland province, because hot-water pipes begin to radiate heat almost as soon as the fire is started. In this climate large fires would not be necessary, and the system once installed the expenditure for fuel would be very moderate, taking in consideration the much greater comfort and the much less liability to illness that would be experienced. I am confident that if this system were once tried, the delightful, even temperature produced combined with the saving of labor and the greater cleanliness, would so commend it to the user that it would soon be considered indispensable. Hot-water heating is making some progress at Wellington and in the South Island, where the weather is colder."

SITUATION AT CHRISTCHURCH.

The American consular agent at Christchurch, Mr. Frank Graham, writes:

"Open coal fires have been vastly improved of late by the principle of slow combustion and by introducing the cold air from the sides of and under the hearth and the substitution of fire clay material instead of iron, the latter being used only for the grate on which the fire rests. These fires are very economical, give out great heat, and require much less attention than the ordinary coal fire grate. These fires are not yet in common use, but are coming on to the market under patent rights. [After describing gas fires, gas radiators, steam radiators, hot-water radiators, hot-air and kerosene heaters, all of which, he says, are used to some extent, Mr. Graham adds:]

"The winter in this provincial district of Canterbury is not severe by comparison with other places, and it is only for four or five months of the year that any artificial heat is required in the rooms of dwelling houses. What, however, is required is a domestic hot-water supply for baths, etc., all the year round, and for this purpose the kitchen cooking range supplies the necessary heating power. No new house of any pretensions is being built without a hot-water supply being provided for, and this extends to the dwellings of the working classes. Therefore I think it extremely unlikely that a double system, which steam or hot-water heated rooms would entail, will ever come into general operation in this part of New Zealand for dwellings. At the same time the double system, or a more extensive single system for hot-water supply and heating rooms, may come more into use for large buildings where there are many occupants, public libraries, hotels, etc., as new buildings are erected and provision for pipes, etc., made at the time of erection."

GAS FIRES IN DUNEDIN.

The American consular agent at Dunedin, Mr. F. O. Bridgeman, writes:

"Hot-water pipes for heating are little used in this locality, either in business premises or private residences, although I should think this system might be used to advantage in hotels and other large buildings. A large private residence recently built in this city has a system of hot-water or hot-air pipes installed, but this is the only instance I know of this system of heating being used here. In business premises in Dunedin gas fires are used very extensively. They are convenient when a fire is only required temporarily."

PARAGRAPHS.

The Stanton Heater Company, of Martin's Ferry, Ohio, have just finished installing a six-ton power riveter for driving ⅜-inch rivets cold. This riveter was installed especially to facilitate the manufacture of the Stanton Upright Steel Furnace, which is said to be proving very popular with the trade.

The Razor Furnace Company of Barberton, Ohio, has been incorporated with a capital stock of $10,000, by H. F. Razor, Clyde O. Razor, Ernest Loeffler and S. A. Decker. The company will manufacture a furnace invented by H. F. Razor, who has been connected with May & Fiebeger of Akron, Ohio. It is proposed to build a plant in Barberton for the manufacture of the furnace.

Every successful business man has been a good advertiser; every good advertiser is a successful business man.—Mahin's Magazine.

Tinshop

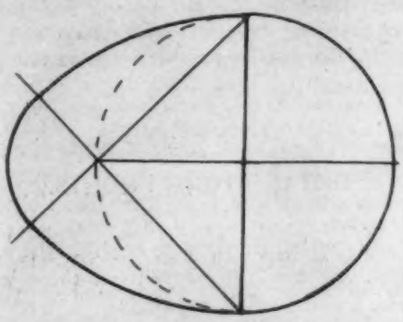
WHAT A SHEET METAL WORKER SHOULD KNOW.

BY H. E. OSBORNE.

NO. 9.

To describe an egg-shaped oval.

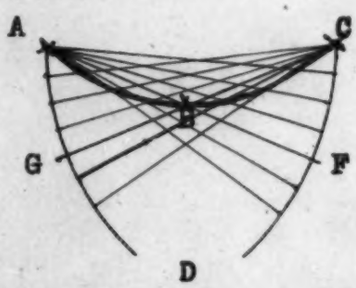
Describe a circle the size desired for the round end of the figure, and draw two diameters at right angles, as shown in cut. Then draw a straight line



from each end of one of the diameters through the extremity of the other diameter and extending indefinitely. With each end of the first diameter for center, and radius equal to the diameter, strike an arc from the opposite end of the diameter just to the diagonal line. Then with the intersection of the diagonal lines with the other diameter for center, and radius to just meet the previous arcs, or side arcs, draw the small end arc, which completes the figure.

To draw an arc through three points without locating the center.

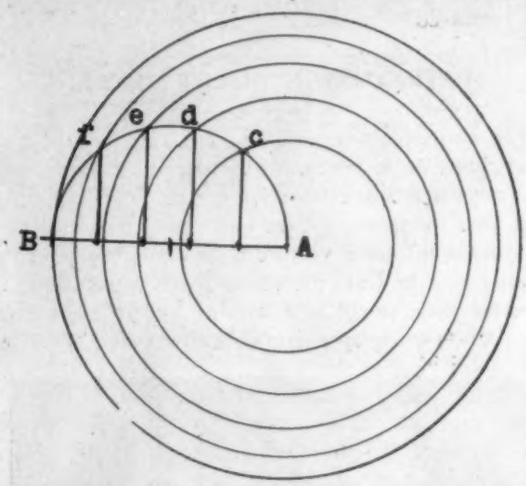
Let A B and C be the points. Then with A and C as centers, and radius from A to C make arcs from A and C indefinitely towards D. Draw a straight line from A through B intersecting the arc C D at F. And another straight line from C through B intersecting the arc A D at G.



Space the arcs between A and G, and between C and F into the same number of equal spaces, continuing one or two of the spaces beyond G and F towards D. Connect the points marked on A D with the point C, and the points marked on C D with the point A, and draw a freehand line through the intersections of these lines.

To draw any number of concentric circles, the area of each circular ring thus formed being equal to the area of each of the others and to the circle in the center.

Draw a straight line A B, and space it into the number of equal spaces desired. Bisect A B and draw upon it a semicircle, and draw a line perpendicular to A B from each of the points to the circumference of



the semicircle, as c, d, e, and f. Then with A as center and radius A c describe the inner circle. The next with radius A d, &c., as shown in cut.

A RECORD-BREAKING OUTPUT.

The Carnahan Tinplate & Sheet Company of Canton, Ohio, inform THE AMERICAN ARTISAN that their output for the month of August was 1,917 net tons, which beats their previous record by 100 tons. This output was not only a record for the Carnahan mill, but is said to be the record up to date for the United States for a six-mill tin plant. An analysis of this tonnage shows an average output by turn of 9,000 pounds, and as the average gauge rolled is 29½, the magnitude of the tonnage turned out is very easily seen. The report continues as follows: "We have not lost an hour this year on account of the heat, which is due principally to the good moral character of the men we employ, to their youth, and the harmony with which they work with the various heads of the different departments."

"VALUABLE HINTS TO ROOFERS."

Geo. Callahan & Co., 129 Front St., New York City, are preparing a booklet entitled "Valuable Hints to Plumbers, Steam Fitters and Roofers." It will be sent free of charge when completed to those inquiring for it and it is said it will be replete with such hints as the following:

"How to solder without heating: By taking 2 oz. of brass filings, 2 oz. of steel filings, fluoric acid ¼ of an oz.; mix the filings with acid and apply the solution after thoroughly cleaning the parts in contact to the parts to be soldered, then dress together. Do not keep this liquid in glass but in lead or earthen vessels."

Messrs. Callahan & Co. have manufactured Callahan's Steam Joint and Pipe Cement, Rubber Roofing Cement, Soldering Fluid, and Elastica Liquid Coating for a great many years, their customers including the United States Government.

Their catalogue will be sent free on request and

they invite roofers to get on their mailing list for the forthcoming free booklet. When writing Geo. Callahan & Co., address Santos Bldg., 129 Front St., New York, N. Y., and kindly mention THE AMERICAN ARTISAN.

PATRIOTISM IN SHEET METAL.

The hardware firm of B. E. & L. E. Anderson of Cove, Oregon, is composed of patriotic citizens who believe in a fitting celebration of the Fourth of July. This year the town of Cove had a four days' celebration which attracted visitors from many towns in the vicinity and the Cove merchants made extra efforts to decorate their stores in a striking and original manner. The photograph reproduced herewith is that of

A Sheet Metal Badge for Fourth of July Decoration, Made in the Tinshop of B. E. & L. E. Anderson, Cove, Oregon.

a mammoth G. A. R. badge which was made of sheet metal in the Anderson tinshop and adorned the front of the Anderson store during the celebration. The veterans shown in the photograph are, on the left of the picture, Comrade S. A. Anderson, father of the members of the firm, and Comrade B. Sterns of Cove on the right. The materials used and the methods employed in making the badge are described by Mr. B. E. Anderson as follows:

"The eagles and cannons were made out of one piece of No. 24 galvanized iron. The ten parts representing cannon balls are ten separate pieces or hemispheres, made out of the galvanized iron, soldered to the edge of the cannons. The saber displayed on the front of the cannon is made from heavy wire flattened and shaped. The legs of the eagle are bumped out in relief over the cannons. At the bottom of the feathery part of its legs, a hole is punched in the iron and twisted wire is inserted and soldered, representing the lower part of legs and claws of the eagle in which the saber is fastened.

"So much for the upper part of the badge. Now we will commence on the star part by cutting the body of same. Around the edge of the points is a border made out of a two-inch strip of iron folded in the middle and soldered over the edge of the points. Over this is a sheet iron ring one inch wide, equal in diameter to the field of the star. This ring is soldered fast wherever it touches the border strips. Then five emblems of the order were bumped in relief on the different points. Then the figures in the center of the star were bumped in relief on a separate piece of iron. These figures represent the Goddess of Liberty, the soldier and mariner, the widow and orphan. To the right and left of these figures is the Star Spangled Banner, all bumped in relief on No. 24 galvanized iron, afterward trimmed off to the shape as seen.

"After the eagle and points of the star were bronzed and the center of the star was enameled in white, these bronzed figures were fastened in place by copper wire passing through the back of the star. Then a cotton flag was made to form the connecting link and we had the badge as seen in photograph.

"This represents quite a bit of hard work, but the effect is pleasing to all old soldiers and patriotic citizens."

METAL STORE FRONTS.

There is a comparatively new field for the hardware dealer in selling metal store fronts to those who wish to improve an old wooden building or who want to obtain the best results in a new building for the least money. The St. Paul Roofing, Cornice & Ornament Company of St. Paul, Minnesota, call the attention of dealers to this fact and advise them to keep their eyes open for prospects. When the prospect appears the company offers to help the dealer sell their metal store fronts. They say: "We are the inventors and original manufacturers of rock-faced metal sidings—in the lead at the start and still there."

Steel ceilings, roofings, tanks, pipe, "Easy Bead" eaves trough and other high quality sheet metal products are made by the St. Paul Roofing, Cornice & Ornament Company, who will send catalogue and other particulars on request. When writing them kindly mention THE AMERICAN ARTISAN.

ROOFING SLATE.

The Auld & Conger Co., of Cleveland, Ohio, are in an especially favorable position when it comes to furnishing Roofing Slate in any quantity, since they operate their own quarries and manufacture and sell all grades of slate. Roofers' supplies, tools, cement, nails and felt can also be obtained from them.

Roofers are invited to write them for delivered prices. Address The Auld & Conger Co., Dept. 5, Cleveland, Ohio, and when writing kindly mention THE AMERICAN ARTISAN.

QUICK SHIPPERS OF SHEET METALS.

Tanner & Company of Indianapolis, Indiana, lay claim to making prompt shipments of all orders for sheet metals and hence claim the title, "The Quick Shippers." They carry almost 100 different gauges and sizes in cold rolled steel, Nos. 14 to 28 inclusive; Wood's Refined Iron No. 14 to 27 inclusive; Apollo Galvanized Steel No. 16 to 30, inclusive; Griffith's Galvanized Charcoal Iron Nos. 24 and 26; Wellsville

Polished Steel 28 x 60 and 24 x 101; Wood's Planished iron (A) and (B), 28 x 60; Genuine Russia Iron Nos. 10 and 11, 28 x 56.

When writing Tanner & Company in regard to any of their line of sheet metals kindly mention THE AMERICAN ARTISAN.

THE FIRE-RETARDING "STAR" VENTILATOR

A ventilator with interesting special features is found in the product of Merchant & Evans Company, known as the Fire-Retarding "Star" Ventilator.

The roof of this ventilator is movable vertically, and is held in its highest open position by a lever movement, controlled by a fusible link. In case of a fire the link parts, and the top drops down by gravity, closing the opening.

The top is also a damper itself, as by regulating the chain length the opening is partially or wholly closable at any time, while still retaining its automatic closing feature in case of fire.

Many of these ventilators are now in use. They are claimed to be absolutely storm-proof and to have a proven speed of air exhaust in excess of any other made. They can be supplied with glass top.

For further particulars, prices, etc., address Merchant & Evans Company, Philadelphia, and kindly mention THE AMERICAN ARTISAN.

NOTES AND QUERIES.

GASOLENE LIGHTING OUTFITS FOR STORES.

From Roy Sammons, Springfield, Ohio.

Kindly give me the name of a manufacturer of gasolene lighting outfits for stores for whom I might obtain an agency.

Ans.—Messrs. Windhorst Company, 104 N. 12th street, St. Louis, Missouri.

SHEET METAL CUTTING SCHOOL.

From Bernhard Guenther, 264 Avondale Avenue, Chicago.

Kindly advise me where I can learn sheet metal cutting in Chicago.

Ans.—Armour Institute, 33d and Armour Avenue, Chicago; Coyne's Trade School, 840 N. Ashland avenue, Chicago.

RUBBER STAMPS.

From Heilstadt Hardware Company, LaSalle, Illinois.

Kindly give us the name of a firm that makes rubber stamps.

Ans.—Columbia Stamp Works, 130 Dearborn Street, Chicago; P. A. Salisbury-Schulz Company, 166 Randolph Street, Chicago.

BRASS ANGLE STRAPS.

From Max Sturm, Cleveland, Ohio.

Kindly give the name of a manufacturer who can make brass or brass plated box angle straps.

Ans.—Turner Brass Works, Franklin and Michigan Streets, Chicago, and Sycamore, Illinois.

WINDOW SCREENS FOR SCHOOLS.

From M. P. Brewer & Company, Prophetstown, Illinois.

Kindly give me the name of a manufacturer of window screens for schools—5 feet 8 inches by 2 feet 8 inches with iron rods.

Ans.—Gilbert, Bennett Mfg. Company of Georgetown, Connecticut, and 59 Clark street, Chicago.

"LINSLEY'S WIRE CLOTH AND NETTING PRICE BOOK."

From C. P. Hosmer, Belle Plaine, Iowa.

Can you tell me by whom "Linsley's Wire Cloth and Netting Price Book" was published?

Ans.—It was published in 1891 by F. J. Linsley at New Haven, Connecticut.

STEEL HOT WATER BOILERS.

From W. W. Wheeler & Son, Harlem, Iowa.

From whom can we obtain information regarding steel hot water boilers?

Ans.—Kewanee Boiler Company, 35 Michigan avenue, Chicago.

ITEMS.

The Royal Enameling & Stamping Works, Des Plaines, Ill., has been incorporated with a capital of $150,000 by John D. York, Nathan D. Kaplan and Fred W. Kraft.

D. W. Noble of Owen, Wisconsin, writes THE AMERICAN ARTISAN under date of August 25, as follows: "Please discontinue my ad for a position, as I have had more replies than I can answer."

Peter Gray & Sons, Boston, capital $30,000, have been incorporated to manufacture sheet metal goods. The officers are: President, G. M. Gray; treasurer, J. F. Gray; clerk, M. H. Gray, all of 86 Union street, Boston.

The Niles Corrugating Company of Niles, Ohio, manufacturers of black and galvanized sheets, corrugated iron and steel roofing, will extend their galvanizing and corrugating departments by the erection of new buildings and the addition of new equipment.

F. B. Karl, who has conducted a sheet metal working, heating and plumbing business for nineteen years in Delaware, Ohio, announces that on October 1 he will consolidate with the Delaware Supply Company, dealing in hardware of all kinds.

The A. E. Traeger Specialty Company has been incorporated at Buffalo, N. Y., with a capital stock of $15,000, to manufacture sheet metal and wire goods specialties, cooking utensils, etc., and will begin operations as soon as factory premises are secured. August E. Traeger, 607 Ellicott square, Buffalo, is president.

Copper mining in Norway is receiving attention, being stimulated by high prices. It is calculated that this industry in 1906 gave employment to 4,300 men, including laborers employed in developing new diggings. The copper production in 1906 is stated to have been worth nearly $2,000,000, or largely in excess of any previous year.

The Allegheny Cornice & Skylight Company of Allegheny, Pennsylvania, is adding to its plant a two-story building, 100x140 feet, to be used as a cutting and forming department. The offices of the company will be located on the second floor of the new struc-

ture. When the new building is completed another 75x100 feet will be erected to serve as a warehouse.

President E. L. Seabrook of the National Association of Master Sheet Metal Workers, writes THE AMERICAN ARTISAN under date of September 4th that owing to a fire in the establishment where the Tin Roofers' Handbook is being printed, only a very few have been received and none mailed to the trade. It is expected all will be mailed the coming week. The Handbook is a valuable publication which the National Association hopes will find its way into the hands of every tin roofer in the country.

Mr. Geo. W. Schmitt of Oakland, California, was in Chicago August 31 on his return from the Cleveland convention of the Master Sheet Metal Workers. Mr. Schmitt is president of the George W. Schmitt Heating & Ventilating Company, 1160 Webster street, Oakland, and is doing a great deal of furnace work in connection with the rebuilding of the city of San Francisco. He is a live, up-to-date member of the trade and has the best wishes of THE AMERICAN ARTISAN for his continued success.

The Martin Metal Mfg. Company has been organized and will establish a plant at Wichita, Kansas, for the manufacture of sheet metal articles, including galvanized tanks, cornices, skylights, eaves trough, conductor pipe, etc. The company has been capitalized at $50,000, and the officers are as follows: Ed. Hockaday, president; F. W. Martin, vice-president and manager; E. T. Battin, treasurer; I. N. Hockaday, secretary. A factory building is being erected on a site purchased for the purpose. It will be 50x100 feet of brick construction and equipped with modern machinery. Over 50 hands will be employed, and it is expected to begin operations this fall.

THE USES OF COPPER.

The average man, if asked to name, offhand, the uses of copper, would be likely to reply that the metal was used mainly for coining pennies and making wire, yet these uses employ barely more than a quarter of the copper that is produced. On second thought he might smile at naming copper coinage as an important consumer of the metal, yet his first thought would be nearer right than his second, for the Chinese empire has used fifty thousand tons of copper for making new coins within the past two years, thereby increasing the circulating medium of the country to the extent of four ounces for each inhabitant—for while fifty thousand tons of copper is a large quantity of metal, sufficient to load a thousand freight cars of the heaviest type used on American railroads, it is but a quarter of an avoirdupois pound per capita, when divided among four hundred million people.

Only the expert, or those engaged most actively in the copper industry, have the slightest idea of the diversified uses to which copper is put, says a contemporary in its review of the new edition of The Copper Handbook, published by Horace J. Stevens, of Houghton, Michigan. Copper enters into almost every form of human activity, and the multiplicity of its uses is most surprising. Electric light, power and traction are immense consumers of the metal in the form of wire, and telephones and telegraphs find it indispensable, yet electricity requires only a trifle more than a quarter of the metal made. The engineering trades consume more than half of all the copper produced, mainly in the form of brass, but there are about a score of friction metals and alloys, each having its specific use, into which copper enters as a component part.

The building trades are enormous consumers of copper, and this sort of consumption is increasing rapidly. Copper roofs, cornices, and fronts adorn the exteriors of business buildings in thousands of towns, while for interior work the great majority of modern buildings use copper, brass or bronze locks, knobs and butts. Brass pipes, nickeled, are in modern bathrooms and lavatories, and brass and bronze chandeliers, gas and electric fixtures are almost invariable. A dozen or more other very common domestic uses of copper are mentioned.

In the manufacturing world the uses of copper and brass are innumerable. One concern in the Naugatuck valley of Connecticut buys copper in ten-ton lots, monthly, solely for the making of watch dials, all of the better grade dials being of copper, enameled. The common pin requires hundreds of tons of copper yearly, insignificant as a single pin may seem. Bals for shoes and tips for shoe-laces require metal by the scores of tons, and the thin metallic tips on rubber-tipped lead pencils are responsible for a surprising depletion in the stock of the metal.

In addition to the consumption of the metal iself, tens of thousands of tons of copper sulphate are required for the arts and manufactures, and for horticultural purposes, in spraying fruit trees, bushes and vines. It is very evident that copper plays a vital, and a far more important part than commonly supposed, in twentieth century civilization.

ROCK-ISLAND FRISCO OPPORTUNITIES.

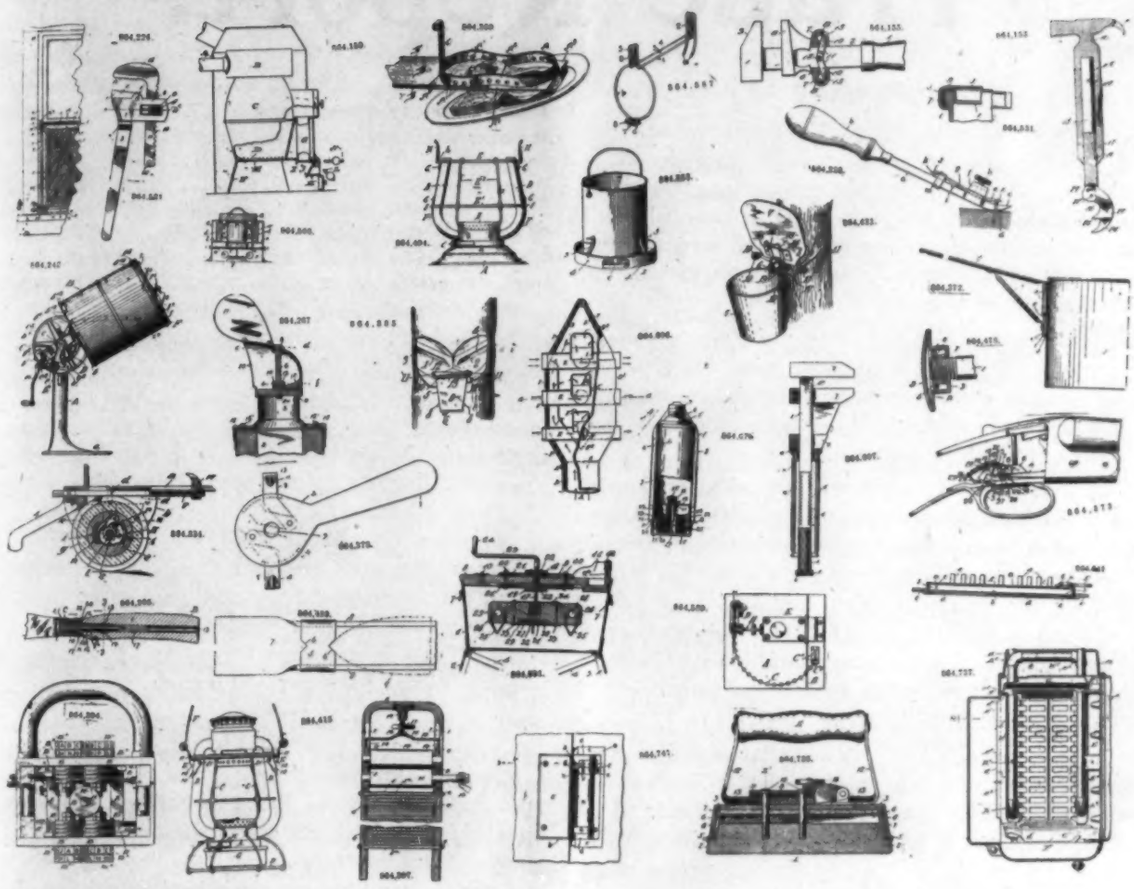
The Passenger Department of the Rock Island-Frisco Lines has issued a very interesting folder showing the "Factors of Prosperity" in the states served by these lines.

These states are described as "eighteen of the richest and most prosperous commonwealths in the world's most productive nation, a territory offering the most favorable opportunities for the establishment of successful enterprises."

Correspondence regarding opportunities in any part of the Rock Island-Frisco states is invited and full information will be promptly supplied on request. Address John Sebastian, passenger traffic manager, Chicago or St. Louis, and when writing kindly mention THE AMERICAN ARTISAN.

To keep iron and steel goods from rust, says the Mechanical World, dissolve half an ounce of camphor in one pound of hog's lard; take off the scum, mix as much blacklead as will give the mixture an iron color. Iron and steel goods rubbed over with this mixture, and left with it on twenty-four hours, and then dried with a linen cloth, will keep clean for months.

NEW PATENTS.



864,153—Combination Tool. Harry W. Boltz, Lebanon, Pa. Filed July 19, 1906. Serial No. 326,897.

864,155—Wrench. Llewellyn D. Carter, Los Angeles, Cal. Filed April 17, 1905. Serial No. 256,092. Renewed Jan. 23, 1907. Serial No. 353,691.

864,159—Heater. Anthony B. Ferdinand, Wauwatosa, Wis. Filed Sept. 28, 1906. Serial No. 336,642.

864,205—Table Cutlery. William H. Smith, New Britain, Conn., assignor to Landers, Frary & Clark, New Britain, Conn., a corporation. Filed June 12, 1907. Serial No. 378,546.

864,223—Combined Tack and Staple Extracting Tool. Henry J. Behr, Philadelphia, Pa., assignor to Gustav A. Hildebrand, Philadelphia, Pa. Filed Jan. 9, 1907. Serial No. 351,401.

864,224—Metallic Framed Window Screen. Simon W. Benson, Chicago, Ill. Filed May 8, 1905. Serial No. 259,256.

864,242—Tumbling Barrel. Harry J. Guttman, Chicago, Ill., assignor of one-third to Alexander E. Keith and one-third to Samuel Cole, Chicago, Ill. Filed June 14, 1905. Serial No. 265,225.

864,267—Chimney Cowl. Thomas B. Samuel, Hiawatha, Kan. Filed Aug. 12, 1905. Serial No. 273,968.

864,334—Roller Skate. Paul G. Pilz, Schlettau, Erzgebirge, Germany. Filed Aug. 16, 1906. Serial No. 330,886.

864,369—Egg Poaching Pan. William J. Graham, Savannah, Ga. Filed Feb. 24, 1906. Serial No. 302,770.

864,372—Detachable Handle for Pots, Kettles, etc. Rudolph Hoffmann and Frederick W. Pleines, New Haven, Conn. Filed June 17, 1907. Serial No. 379,372.

864,373—Single Trigger Mechanism for Double Barrel Guns. Michael D. Hogan, Chevy Chase, Md. Filed Nov. 28, 1905. Serial No. 289,400.

864,378—Jar Opener. Edwin F. Ives, Wallingford, Conn. Filed April 15, 1907. Serial No. 368,146.

864,385—Turpentine Cup and Attachment. John J. Palmer, Madison, Fla. Filed March 23, 1907. Serial No. 364,148.

864,394—Combination Padlock. Neuman Tobias, Kingston, Jamaica. Filed Sept. 20, 1906. Serial No. 335,350.

864,397—Wringer. Henry T. White, Mount Orab, Ohio. Filed March 22, 1906. Serial No. 307,516.

864,404—Tubular Lantern. Charles L. Betts, New York, N. Y., assignor to R. E. Dietz Company, New York, N. Y. Filed June 22, 1904. Serial No. 213,630.

864,415—Lantern. Ernest C. Everett, New York, N. Y., assignor to R. E. Dietz Company, New York, N. Y. Filed March 23, 1907. Serial No. 364,046.

864,421—Sap Pail or Bucket. John Hall, North Monroe, N. H. Filed Feb. 5, 1907. Serial No. 355,907.

864,459—Folding Device for Sad Irons. Inez L. Duncan, Windsor, Vt. Filed March 21, 1907. Serial No. 363,720.

864,478—Expansive Nut. Walter R. Miller, Bellville, Ohio. Filed Dec. 28, 1906. Serial No. 349,876.

864,508—Cooking Stove. Dora Buhlmann, Eltville, Germany. Filed Nov. 9, 1906. Serial No. 342,727.

864,518—Heat Distributer for Cooking Utensils. Arthur B. Cruickshank, London, England, assignor of one-half to himself and one-half to Frank L. Tainter, London, England. Filed Aug. 25, 1906. Serial No. 331,985.

864,521—Wrench. Louis J. Eyth, Butler, Pa., assignor of one-fourth to J. C. Aber and one-fourth to Matthew Yost, Butler, Pa. Filed March 8, 1907. Serial No. 361,325.

864,531—Sheet Metal Can. William Haaker, Verona, N. J. Filed Feb. 11, 1907. Serial No. 356,695.

864,556—Drip Pan. Edward C. Reiter, Rockville, Conn. Filed March 22, 1906. Serial No. 307,376.

864,559—Safety Chain for Doors. Clement D Rinald, Philadelphia, Pa. Filed April 14, 1906. Serial No. 311,659.

864,587—Stovepipe Holder. William Wyatt, Lima, Ohio. Filed Dec. 10, 1906. Serial No. 347,112.

864,591—Washing Machine. George R. Adams, Hiawatha, Kan. Filed May 3, 1906. Serial No. 315,098.

864,609—Ventilator. Herbert Brassington, Morecambe, England, assignor to Charles Cressey and Willie Crossley Keighley, Morecambe, England. Filed Oct. 23, 1906. Serial No. 340,166.

864,607—Wrench. Ernest R. Breckel, Etna, Pa. Filed June 28, 1907. Serial No. 381,313.

864,676—Fountain Polisher for Stoves. William J. Nagely, Toledo, Ohio. Filed Feb. 18, 1907. Serial No. 357,793.

864,735—Sad Iron. James M. Harper, Chicago, Ill., assignor to Harper Supply Company, Chicago, Ill., a corporation of Illinois. Filed Feb. 26, 1906. Serial No. 302,850.

864,737—Fire Box for Cooking Stoves. Augustus F. Harter, Chicago, Ill., assignor to Cribben & Sexton Company, Chicago, Ill., a corporation of Illinois. Filed April 22, 1907. Serial No. 369,444.

864,747—Hinge. Alexander G. Wilson, Chicago, Ill. Filed Oct. 8, 1906. Serial No. 338,047.

Trade Report.

HARDWARE.

Quietness continues to prevail in the hardware trade, but with the vacation season drawing to a close it is confidently expected that the prevailing dullness is near an end. There has been nothing abnormal about the situation, the prevailing tone of the market being seasonable and Western jobbers express satisfaction with their August sales.

It is understood that the volume of business for the past month will compare favorably with that of a year ago. This is extremely satisfactory in view of the fact that buyers generally have been extremely conservative in all their movements.

The feature of the week was the advance in wire products taking effect September 3, when the American Steel & Wire Company raised prices 5c all around. It was unexpected by the trade, but so far has had no effect on the demand, which continues very heavy. Quotations on wire rails, f. o. b. Pittsburgh, plus actual freight to point of delivery, are as follows: Carloads, jobbers, $2.05; carload lots to retailers, $2.10.

The price of cut nails advances 5c a keg following the advance in wire nails, in accordance with a resolution passed at the July meeting of the Cut Nail Association. Chicago quotations are as follows: Iron cut nails, car lots, to jobbers, $2.38; to retailers, $2.43; steel, to jobbers, in car lots, $2.28; to retailers, $2.33.

New business in barb wire is somewhat light, but specifications are freely made on old contracts. Mills are making prompt delivery.

Demand for fence wire is very heavy in various sections of the country, particularly through the South.

New prices on scythes announced September 1 are said to represent an advance of 75c per dozen.

The market for builders' hardware is quiet and manufacturers are said to be shading prices in some cases as a result of earnest competition for business.

Business in galvanized ware is reported to be extremely good, indicating an increased consumption of such goods.

Manufacturers of stamped and pieced tinware, enameled ware, galvanized ware, etc., held their regular conference last week at Saratoga Springs, New York. No important changes in price were made.

TIN PLATE.

The market for tin plate is steady and new business continues of about normal proportions for this season of the year. The decline in the price of pig tin has had no effect on tin plate. Prices and quotations are unchanged.

There are indications that the large canning interests will come into the market this month with their contracts for bright plate for October and November shipment, and while the tonnage in these contracts will not be as heavy as last year, it will be large enough to give the tin plate mills practically full work for the balance of this year.

American coke tins, I. C., from store, New York:

Bessemer steel, 107 lbs., 14x20	$4.55@4.60
Bessemer steel, 100 lbs., 14x20	4.40@4.45
Bessemer steel, 95 lbs., 14x20	4.30@4.35
Bessemer steel, 90 lbs., 14x20	4.20@4.25
Am. charcoal ternes, 8-lb. coating—	
Worcester grades, 14x20, 107 lbs	4.50@4.55
Worcester grades, 14x20, 100 lbs	4.35@4.40
Worcester grades, 20x28, 200 lbs	8.25@8.30
For prompt shipment f. o. b. mill—	
Coke tins, 14x20, I. C	4.05@4.10
Coke tins, 14x20, 100 lbs.	3.90@3.95
Coke tins, 14x20, 95 lbs.	3.85@3.90
Coke tins, 14x20, 90 lbs.	3.80@3.85
Charcoal terne, 20x28, I. C	7.50@7.55
Charcoal terne, 20x28, 200 lbs.	7.20@7.25

Usual differences for odd sizes and weights.

SHEET ZINC.

Demand for sheet zinc is normal for the season at the recent reduction to the new base price of $7.75 per 100 pounds, f. o. b. smelter, with 8 per cent discount. There is no charge for extras. Prices on cask lots are held at $8.60 per 100 pounds.

SHEETS.

Premiums for prompt delivery of black sheets have practically disappeared, the mills having nearly caught up with the demand, but delays are still experienced in getting galvanized sheets and the leading mills are still from two to three months behind. Prices on sheets are firm.

The following prices are for 500-bundle lots and over, f. o. b. mill:

Gauge.	Net. Black.	Net. —Galvanized.—	List.
No. 30	2.25	4.25	21
No. 29	2.75	4.00	19
No. 28	2.60	3.75	17
No. 27	2.50	3.55	16
Nos. 25 to 26	2.45	3.35	15
Nos. 22 to 24	2.40	3.15	14

COPPER.

At last the expected break in copper prices has arrived. The leading producers and selling agents announced September 3 that they have established their prices for Electrolytic copper at 18 cents a pound, and it is hoped that by this action the deadlock between buyers and sellers will be broken. It is reported from reliable sources that considerable business has already been done at the new figure. This is the first real buying movement in several months.

For some time past the trade has been talking 18 cents as a suitable basis for Electrolytic, and some of the principal buyers have intimated that they would be willing to cover their fall requirements around that price. The future alone will decide whether the market has now reached a solid foundation, but the prospects are regarded as more cheerful than at any time in many weeks.

Lake copper is also affected by this action of the producers, and it was quoted in New York, September

3, at 19 to 19¼ cents for prompt delivery, and 19 cents for futures.

The better grades of Casting copper show very slight change, and are firmly held at 17⅝c to 17⅞c.

The base price of sheet copper has been reduced from 28c to 24c.

Extreme fluctuations for this year:

	Highest.	Lowest.
Electrolytic copper, spot	25½	17½
Lake copper, spot	25¾	17¾
Casting copper, spot	24⅞	17
London, spot	£110 15 0	£74 0 0
London, futures	112 0 0	73 10 0
London, best selected	118 0 0	84 0 0

MERCHANT BARS.

There is an improvement in the demand for bar iron and specifications are being freely made. Prices are maintained on the basis of $1.60, Pittsburgh. The steel bar situation is unchanged, with continued requests for prompt shipment and specifications being freely made.

PIG IRON.

The pig iron market is still very dull and considerable weakness has manifested itself in Southern grades. A decline of 50c a ton in Northern and $1.00 a ton in Southern iron for the last quarter occured during the week, bringing Northern No. 2 Foundry to the basis of $23.50, Chicago, and Southern No. 2 to $18, Birmingham. For prompt delivery prices range from $24 to $25, Chicago, for Northern No. 2, and $19 to $19.50 for Southern No. 2. There is little inquiry in the market and nothing doing at present for 1908 delivery.

CHICAGO MARKET.

Fourth Quarter.

Lake Superior Charcoal	$27.00@27.25
Northern Foundry No. 1	24.00@24.50
Northern Foundry No. 2	23.50@24.00
Northern Foundry No. 3	23.00@23.50
Southern Foundry No. 1	22.85@23.35
Southern Foundry No. 2	22.35@22.85
Southern Foundry No. 3	21.85@22.35
Southern Foundry No. 4	21.35@21.85
Southern No. 1 Soft	22.85@23.35
Southern No. 2 Soft	22.35@22.85
Southern Gray Forge	20.85@21.35
Southern Mottled	20.35@20.85
Malleable Bessemer	23.50@24.00

BIRMINGHAM MARKET.

No. 1 Foundry	$19.00@19.50
No. 1 Soft	19.00@19.50
No. 2 Foundry	18.00@18.50
No. 2 Soft	18.00@18.50
Gray Forge	17.00@17.50
No. 2 Foundry, 1st quarter of 1908	17.50@18.00

PITTSBURG MARKET.

No. 2 Foundry	$22.00@22.50
Grey Forge	20.90@21.90
Bessemer	22.90
Basic	21.90

Rogers, Brown & Co., Cincinnati, will say in their weekly report:

"Much more interest is manifest in the local market for all grades. This is true only of spot business and iron for early delivery. There is still a decided waiting attitude on the part of buyers toward forward business and it is a question when this character of business will again be considered seriously. All demand at the present time is based on consumption, which seems to show no let up. Many consumers are finding themselves short of various grades and this class of buying has been brisk during the past week. Some large consumers have been feeling the market for Northern iron and have intimated prices at which business could be done, which have been judged entirely too low by the furnaces and no business has resulted.

The market for finished material has been affected with pig iron and is quiet, but it is stated that contracts now on the books of leading manufacturing concerns will keep them busy up to the handle of the balance of this year.

"The option by the Baltimore & Ohio Railroad on a large tonnage of rails for 1908 has had the effect of creating some little excitement in the rail market, and there is an active buying movement in rails expected at an early date.

"The coke situation everywhere continues strong with an advancing tendency and demand is excellent. Labor trouble and car shortage in the Connellsville field continue to have important bearing on the market at that point. The same is largely true of other districts."

Matthew Addy & Co., Cincinnati, will say in their weekly report:

"As fully 90 per cent of all the iron that this country can make and melt this year was sold in the booming months from January to June, it is natural that there is not much being sold just now. The pig iron market is like a man who has just finished dinner—he has not much appetite for more. The quiet time we have been having is entirely natural and was to have been foreseen. The stronger and heavier the buying movement the surer the comparatively dull period that will follow. To-day the buying that is being done is of comparatively small lots that are needed as fillers here and there. Were any great amount of iron needed on a new order in a hurry it could not be supplied. Furnace order books are nicely filled for the rest of the year. For next year only a small tonnage has been booked. Consumption is keeping on at an enormous rate and some time this fall there will inevitably be a buying movement for 1908. Exactly when this will occur cannot be said at present, but that it will occur is certain. There may be some slight readjustment of prices in the meanwhile, as the famine prices that have been prevailing are not normal. But the famine prices have had the result of putting up the cost of all the elements that enter into the making of pig iron and an immediate great reduction in prices is impossible, unless makers of iron are willing to stand a heavy loss. The iron trade has regularly gone through just such times as we are now experiencing and has always come out of them in good shape.

"Coke has been quite the reverse of pig iron. It has been selling freely both for forward and prompt shipment. There is apprehension of the normal car shortage in the fall, and so the fore-handed consumers are taking steps now to provide a coke pile for an emergency."

CHICAGO OLD METAL MARKET.

Heavy copper	$15.00@16.00
Copper wire	15.00@16.00
Light copper and bottoms	14.00
Heavy composition	14.00
Heavy yellow brass	10.50
Light brass	8.50
Yellow borings	9.00
Red borings	12.00
Zinc	4.00
Block tin pipe	33.00
Heavy lead	4.25
Tea lead	3.75
Zinc	4.25
Good mixed pewter	25.00
Clean car brasses	13.00
Stereotype metal	5.00
Electrotype metal	4.25

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box
IC	14x20	$7 20
IX	14x20	8 25
IXX	14x20	9 40
IXXX	14x20	10 65
IXXXX	14x20	11 80
IC	20x28	14 50
IX	20x28	16 50
IXX	20x28	18 95
IXXX	20x28	21 35
IXXXX	20x28	23 75

COKE PLATES.

Cokes, 180 lbs	IC	20x28	$8 50
Cokes, 200 lbs	IC	20x28	9 00
Cokes, 216 lbs	IC	20x28	9 50
Cokes 270 lbs	IX	20x28	11 25

PIG IRON.

Lake Sup. Charcoal	$26 00@$26 50
North'n Fdy., No. 1	26 00@ 26 50
North'n Fdy., No. 2	25 50@ 26 00
North'n Fdy., No. 3	25 00@ 25 50
Northern Scotch Fdy	26 00@ 26 50
Ohio Strong Softeners, No. 1	26 30
Ohio Strong Softeners, No. 2	25 80
Southern Fdy., No. 1	23 40@ 25 40
Southern Fdy., No. 2	22 90@ 24 90
Southern Fdy., No. 3	22 40@ 24 40
Southern Fdy., No. 4	21 90@ 23 90
Southern No. 1 Soft	23 40@ 25 40
Southern No. 2 Soft	22 90@ 24 90
Southern Gray Forge	21 40@ 23 40
Southern Mottled	20 90@ 22 90
Southern Silveries, 4 to 6 per cent Silicon	27 40@ 29 90
Jackson Co. Silveries, 8 to 10¢ Silicon	31 40@ 33 40
Ala. and Geo. Car Wheel	26 40@ 28 90
Malleable Bessemer	25 50@ 26 50
Standard Bessemer	25 50@ 26 50
Basic, Pittsburg	23 85

BLACK STEEL SHEETS.

Nos. 11-12 per 100 lbs	$2 60
Nos. 13-14 per 100 lbs	2 65
Nos. 15-16 per 100 lbs.	2 70
Nos. 17-21 per 100 lbs.	2 75
Nos. 22-24 per 100 lbs.	2 80
Nos. 25-26 per 100 lbs.	2 85
No. 27 per 100 lbs.	2 90
No. 28 per 100 lbs.	3 00

GALVANIZED.

Nos. 10-11 per 100 lbs.	$3 15
Nos. 12-14 per 100 lbs.	3 25
Nos. 15-16 per 100 lbs.	3 35
Nos. 17-21 per 100 lbs.	3 50
Nos. 22-24 per 100 lbs.	3 65
Nos. 25-26 per 100 lbs.	3 85
No. 27 per 100 lbs.	4 05
No. 28 per 100 lbs.	4 25

POLISHED SHEET STEEL.

No. 24 per 100 lbs.	$4 90
No. 26 per 100 lbs.	5 00
No. 27 per 100 lbs.	510
No. 28 per 100 lbs.	520

SMOOTH STEEL.

Wood's Smooth,	No. 20	$3 05
" "	No. 22-24	3 10
" "	No. 25-26	3 15
" "	No. 27	3 20
" "	No. 28	3 30

PATENT PLANISHED SHEET IRON

Patent Planished Sheet Iron. "A" $10 20, "B" $9 20

PATENT PLANISHED SHEET STEEL.

Dickey Planished Sheet Steel....8½c

SOLDER.

IXX Guaranteed ½ & ½ per lb.	26½c
Commercial ½ & ½ per lb.	26 c
No. 1 Plumbers	24½c

SHEET ZINC.

600 lb. Casks case, per cwt.	9 50
600 lb. Casks per cwt,	9 50
Blue ta per cwt.	10 50

COPPER.

Copper, sheet, 100 lbs. over, base, 24c

TIN PIGS AND BARS.

Banca, pigs, per lb.	44c
Straits, pigs, per lb.	44½c
Straits in bars, per lb	47c

LEAD.

American Pig	6¾
Bar	7½c
National (White) brands (in less than 100 lb. lots), per lb.	8½c
Sheet.	
Full coils per 100 lbs.	$9 00
Cut coils per 100 lbs.	9 50

HARDWARE.

ADZES.

Carpenters'.	
Plumbs	40%
Coopers'.	
Barton's	20%
White's	15%
Railroad.	
Plumbs	40%
Ship.	
Plumbs	40%
White's	12½%

AMMUNITION.

Caps, Percussion—per 1,000.	
F. L. Waterproof, 1-10s	40c
G. D.	35c
Musket	60c
Cartridges.	
Winchester Rim Fire Ctgs	50&23%
Winchester Cent Fire, Pistol and Rifle	25&3%
Winchester Cent F'ire, Military and Sporting Ctgs	15&8%
Winchester Blank Ctgs. 22 cal.	$1 25
Winchester Blank Ctgs. 32 cal., C. F.	4 60
Winchester BB Caps, Rnd. ball	1 50
Winchester BB Caps, Conical ball	1 95
Winchester Cent. Fire, Military and Sporting Ctgs	15&8%
Primers.	
Berdan Primers	$1 00
Winchester Primers	20%
Shells.	
New Rival Empty Paper Shells, 10 and 12 gauge	25%
New Rival Empty Paper Shells, 16 gauge	20%
Repeater Empty	20%
Leader Smokeless	25%
Winchester Repeater Loaded Shells	40&5%
Winchester Leader	40-10&10%
New Rival Loaded Shells	23½ & 11%
Gun Wads—per 1,000.	
Winchester Gun Wads	15%

Powder.	Each
DuPont's Sporting, kegs	$8 50
" " ½ kegs	2 50
" " ¼ kegs	1 40
Dupont's Sm'k'less. 50-lb. drum	22 45
" " 25-lb. kegs	11 3
" " 12½-lb. kegs	5 80
" " 6¼-lb. kegs	2 97
" " 1-lb. cans	15

Shot.	
Drop shot, sizes smaller than B, 25-lb. bags, per bag	1 95
Drop shot, B and larger sizes, 25-lb. bags, per bag	2 20
Buck Shot, 25-lb. bags, per bag	2 20
Chilled Shot, 25 lb. bags, "	2 20

ANCHORS.

Expansion Screw Anchors 10%

ANVILS.

Trenton, 70 to 80 lbs.	9½c per lb
Trenton, 81 to 150 lbs.	9½c per lb

ASBESTOS.

Board and Paper 25%

AUGERS.

Boring Machine	70%
Irwin's	40&10%
Carpenters' Nut	70%
Hollow.	
Bonney's—list $30.00	75&5%
Stearn's, No. 3	36 00
Post Hole.	
Digwell, 8-inch per doz.	12 50
Iwan's Post Hole and Well	40%
Vaughan's, 4 to 9-in., per doz.	6 25
Rafting.	
Snell's	50&5%
Ship.	
Ford's, with or wi'out screw	40-12½%
Snell's, " " "	40-5%

AWLS.

Brad.	
No. 3 Handled per doz.	$0 40
No. 1050 Handled "	80
Shouldered, assorted, 1 to 4, per gro.	1 20
Patent asst'd, 1 to 4 "	85
Harness.	
Common	95
Patent "	90
Peg.	
Shouldered per gro,	$1 20
Patent "	60
Scratch.	
No. 1, handled "	4 80
No. 15, socket handled. per doz.	1 25
No. 7 Stanley "	1 80
Sewing.	
Common per gro.	90
Patent "	90

AXES.

Boy's Handled.	
Lippincott, 3 lb per doz.	$6 00
Falls City "	6 00
Broad.	
Plumbs, West, Pat	33½%
" Can. Pat	40%
" Firemen's (handled), per doz	$18 75
Plumbs, Miners (handled) "	6 75
Single Bitted (handled).	
Gladiator 3 to 4 lbs., pr dz.	$11 00
Flint Edge " " "	9 25
Standard " " "	9 25
Elec. Chopper, Forest Clipper	10 50
Perfect Premier " "	10 00
Crown " " "	7 00
Single Bitted (without handles).	
Gladiator 3 to 4 lbs. per doz.	$8 50
Flint Edge " "	7 0
Standard " "	7 0
Electric Chopper " "	8 25
Perfect "	7 75
Crown " "	6 25
Double Bitted (without handles).	
Gladiator 3 to 4 lbs. per doz.	$11 50
Flint Edge " "	9 75
Perfect " "	11 0

The above prices on axes of 3 to 4 lbs. are the base prices.
3½ to 4½ lbs. advance 25c.
4 to 5 lbs. advance 50c.
4½ to 5½ lbs. advance 75c.

BAGS, PAPER NAIL.

Pounds	10	16	20	25
Per 1,000	$2.50	3.75	4.50	5.00

BALANCES, SPRING.

Frary's	40%
Pelouze	20%

BARS, CROW.

Pinch or Wedge Point cwt. $3 75

BASKETS.

Clothes.	
Small Willow per doz.	$7 00
Medium " "	8 75
Large " "	10 50
Galvanized Iron. ½ bu. 1 bu. 1½ bu	
Per doz.	$4 75 6 50 8 00

BEATERS.

Carpet.	Per doz
No. 10 Coppered Spring Wire	$0 90
No. 12 Spring Wire	1 10
No. 10 Preston	1 10
Egg.	Per doz
No. 50 Imp. Dover	$0 75
No. 102 " " tinned	85
No. 150 " " hotel	1 40
No. 10 Heavy hotel tinned	2 10
No. 13 " " "	2 30
No. 15 " " "	2 80
No. 18 " " "	4 50

BELLOWS.

Blacksmiths'	65%
Hand.	
8 inch per doz.	$8 50
10 inch "	10 50
Moulders'.	
12 inch "	12 50

BELLS.

Call.	
3 in. Nickeled Rotary Bell, bronzed base per doz.	$5 00
Cow.	
High Grade	60%
Kentucky	65&10%
Door.	Per doz.
New Departure Automatic	$6 00
Rotary.	
3 in. Old Copper Bell	4 00
3 in. Old Copper Bell, fancy	6 00
3 in. Nickeled Steel Bell	4 50
3½ in. Nickeled Steel Bell	5 00
Hand.	
Hand Bells, polished	40&5%
White Metal	40%
Nickel Plated	30%
Swiss	40&33½%
Silver Chime	33½%
Miscellaneous.	
Church and School, steel alloy	50%
Farm, lbs. 40 50 75 100	
Each $1.25 1.60 2.35 2.85	

BEVELS, TEE.

Stanley's, rosewood handle, new list	35%
Stanley's iron handle	35%

BINDING, OILCLOTH.

Zinc	30%
Brass	70&10%
Brass Plated	75&5%

BITS.

Auger.	
Extra Double Spur	70&10%
Ford's Car and Machine	40&10%
Triumph	50&5%
Ford's Ship	40&10%
Irwin	50%
Russell Jenning's	35&10%
Clark's Expansive	50%
Steer's " Small list, $22.00	35%
" Large " $36.00	35%
Irwin Car	45%
Ford's Ship Auger pattern Car	40&10%
Center	40&10%
CounterSink.	
No. 18 Wheeler's per doz.	$1 25
No. 20 " "	1 75
American Snail head. "	75
" Rose "	90
" Flat "	75
Mayhew's Flat "	1 25
" Snail "	1 25
Dowel.	
New Jennings	40&10%
Gimlet.	
Standard Double Cut	80%
German Pattern per doz.	$0 60
German "	85
Gouge "	80
Spoon "	80
Countersink "	1 00
Reamer.	
Jenning's Square "	2 50
Standard Square "	75
German Octagon "	75
Screw Driver.	
No. 7 Common "	50
No. 1 Triumph "	1 25
No. 2 "	1
No. 340 Shepardson's "	
No. 1 Smith's "	

BLACKING, STOVE. (See Polish

BLADES, SAW.

Butchers'.
Standard ⅞ & 1⅛ in. 40%
Clock Spring 40%
Star 15%
Coil ..... each $1 50
Hack.
Disston's ..... 25&5%
Flexible ..... 33⅓&5%
Star ..... 20&5%
Wood.
Jackson's ..... per doz. $2 25
Disston's—No. 5, 16, 26 & 045 .. 4 25
Triumph 3 50
Forest Clipper 3 0

BLOCKS.

Snatch.
Wooden ..... 60&10%
Steel 50%
Tackle.
Iron Strapped 70%
Com. Steel 60%

BOARDS.

Stove 40%
Wash.
Globe, single ..... per doz. $3 15
" double ..... " 3 65
Magnolia ..... " 3 85
Crystal Glass ..... " 4 35
Brass King ..... " 4 50
Nickel Plate ..... " 4 15
Enamel King ..... " 4 35

BOBS, PLUMB.

Carpenters'.
No. 2, iron ..... per doz. $0 65
No. 00, " ..... " 1 30
No. 0, " ..... " 1 80
No. 3, lead ..... " 2 90
No. 4, " ..... " 3 40
No. 113, brass plated. " 1 10
No. N30, nickel plat'd " 1 30
No. N31, " " " 1 85

BOLTS

Carriage, Machine, Etc.
Carriage ⅝x6 and sizes smaller and shorter 70%
Carriage, sizes larger and longer than ⅝x6 ..... 50-10&5%
Machine, ⅝x4 and sizes smaller and shorter 70%
Machine, sizes larger and longer than ⅝x⅝x4 ..... 60%
Elevator ..... 50-10&5%
Plow ..... 60&10%
Stove 80%
Tire 75%
Wagon Box Strap 70%
Mortis Door.
Gem, iron 60%
" bronze plated 30%
Barrel.
Cast 60%
Wrought .....
" Bronzed 50%
Flush.
Wrought ..... 50&10%
Spring.
Wrought .....
" Heavy .....
Square.
Cast ..... 50&10%
Wrought .....

BORERS.

Angular.
Miller's Falls ..... per doz. $13 00
Bung.
Dos.
Enterprise Mfg. Co.'s No. 1 .... $14 00
" " " No. 2 ..... 18 50

BOXES.

Mail, No. 1 2 10
Per doz $3.50 5.50 17.50
Miter.
New Langdon ..... 15&5%
Stanley's 30%
Seavey's ..... each $1 50

BRACES.

Barber's ..... 50&10&10@50&10&15%
Fray's Genuine Spofford's 60%
" Nos. 66 to 146 ..... 50%
" No. 0108 ..... $3 50
" No. 08 ..... 2 75
" No. 010 ..... 2 85

BRACKETS.

Hay-Rack.
Wenzelmann's No. 1 per doz. $9 00
" No. 2 " 9 60
Shelf.
Cast Iron, Bronzed 50, 10, 5%
Griffin Wrought Steel ..... 70&10%
" Folding 70%

BROILERS.

Wire 70%
No. Cwron. Self-Basting. 80

BUCKETS.

Pump Rubber.
Wychoff ..... per gr. $4 75
Cooper ..... " 4 7
Champion ..... " 7 50
Victor ..... " 9 25
Star ..... " 5 00
IXL ..... " 6 75
Well.
Galv'd Qts 10 12 14
Per doz $2.90 $3.25 $3.40
Wooden, top ear, plain, per doz 4 00
" " swivel " 5 10

BUCKS, SAW.

Folding ..... per doz. $2 10

BURRS, RIVETING.

Copper Burrs only 15%
Tinners' Iron Burrs only ..... 65&5%

BUTTS.

Cast Iron ..... 70&5%
Wrought Brass (New List) 30%
Wrought Steel Bright.
Wrought Steel, Japanned.
Nos. 721 an 70%

IPERS.

Double ..... 65&5%
Inside and Outside ..... 65&5%
Wing 70%

CALKS.

Logger's Boot.
(Lufkin R. Co.'s), per M $3 75
Toe.
Shoenberger ..... per ℔ 5 c
Bessemer ..... " 4½c
American ..... " 7 c
Swedes ..... " 8½c

CANS.

Cheese Factory.
Ontario Pattern.
Gallons 20 30 40
Each $4.25 $5.00 $6.25
Milk.
Holstein.
Nos. 300 301 302
Gals. 5 8 10
Per doz. $26.00 $27.00 $30.00
Chicago Pattern.
Nos. 105 108 110
Per doz $20.00 $22.50 $24.00
Iowa Pattern.
Nos. 408 410
Per doz $24.50 $25.50
New Elgin Pattern.
Nos. 705 708 710
Per doz. 27.00 $29.00 $30.50
Burn Pattern.
Nos. 700 701
Gals 8 10
Price $2.40 $2.65

CAN OPENERS.

See Openers.

CAPS, GUN.

See Ammunition.

CARPET STRETCHERS

See Stretchers.

CARRIERS.

Hay.
Diamond, Regular ..... each $3 85
Diamond, Sling ..... " 6 50
Myers' Imperial ..... " 3 85
" Clover Leaf ..... " 4 00

CARTRIDGES.

See Ammunition.

CASTERS.

Standard—Ball Bearing ..... 50&10%
Bed ..... 60&5%
Common Plate.
Brass Wheel ..... 60&10%
Iron and porcelain wheels, new list ..... 60&5%
Philadelphia Plate, new list 70%
Martin's 60%
Payson's ..... 75&10%

CATCHERS, GRASS.

Carroll s No. C ..... per doz. $4.25
Wildermuth's
Nos. 1 2 3
Per doz $5.60 $5.75 $6.25
Nos. 4 5 6
Per doz $6.75 $9.50 $10.00

CHAIN AND CHAINS.

Breast Chains.
Doubleslack ..... doz. pairs $5 75
With Covert snaps. " 5 00
With slide ..... " 3 25
Without slide ..... " 2 85
Bright Ox Chains.
⅝ in. $7.25; ½ in. $5.45 per 100 lbs

Cable Coil Chain.
Inch ..... 5/16 ⅜ 7/16 ½
Per 100 lbs. $10.80 $8.00 $7.00 $6.30
Inch ..... 9/16 ⅝ ¾ ⅞
Per 100 lbs. $6.00 $5.90 $5.75 $5.65
Inch ..... ⅞ 1 1⅛
Per 100 lbs. $5.55 $5.55 $5.65
Cable Log Chain.
Advance 25c per 100 lb. on Cable Coil
Cow Tie Chains.
American 2 toggle ..... 50&5%
" toggle and snap ... 50&5%
" open & closed ring, 50&5%
Halter Chains.
American, new list 33⅓%
German ..... 50&10&5%
Niagara, new list 40%
Brown's, " 40%
Picture Chains.
Light Brass, 3 ft. ..... per doz. 65c
Heavy Brass, 6 ft. ..... " 1 00c
Pump Chain.
Galvanized, per 100 lbs. $5.50
Safety Chain.
Brass 50%
Special Steel Loading Chain.
Inch ..... ⅜ 7/16 ½
Per 100 lbs. ... $16.00 $13.50 $12.50
Stretcher Chains.
5/16 in. $8.50; ⅜ in. $7.75 per 100 lbs.
Tie-Out Chains.
Brown's ..... 70&5%
Trace Chains.
Western Standard.
6½— 6-2 ..... per pair 30c
6½— 8-2 ..... " 34c
6½— 8-3 ..... " 33c
6½—10-2 ..... " 38c
7 — 8-2 ..... " 38c
7 —10-2 ..... " 42c
7 —10-1 ..... " 48c
7 —10-0 ..... " 60c
Add 2c per pair for Hooks.
Add 2c " for Twist Link.
Wagon Stay Chains.
Inch ..... ⅜ 7/16 ½
Per 100 lbs. ... $6.50 $6.00 $5.50

CHALK, CARPENTERS'.

Blue ..... per gross 75c
Red ..... " 65c
White ..... " 55c
Common White Sch'l Crayon 8c

CHARCOAL

In bags ..... per bag 90c

CHECKS, DOOR.

Blount 33⅓%
Sargent's 33⅓%

CHIMNEY TOPS.

Iwan's Volcano 50%

CHISELS.

Box.
Inches 10 12 14
Round, per doz. $2.10 $2.25 $2.75
Flat " 2.85 3.60 4.20
Cold.
Good quality, ½ in. and larger ..... per ℔ 12c
Smaller size per doz.
Socket, Framing and Firmer.
Barton's 20%
Tanged, Firmer.
With handles ..... 30&5%
Choppers, See Cutters, Meat.

CHUCKS, DRILL.

Goodell's, for Goodell's Screw Drivers ..... per doz. $6 25
Yankee, for Yankee Screw Drivers 5 00

CHURNS.

Anti-Bent Wood, Gal.. 5 7 10
Each $3.90 $4.60 $4.85
Belle, Barrel 65-7½%
Common Dash, Gal.. 4 5 6
Per doz $7.75 $8.50 $10.50
Union, Gal. 5 7 10
Each $3.65 $3.90 $4.75

CLAMPS

Adjustable.
Martin's 30%
Carpenters'
Steel Bar 35%
Hose.
Sherman's, brass, ¾ in., per doz. .42c
Double, brass, ¾ in., " 90c
Saw Filers.
Disston's list, $30.00 ..... 30%
Stearn's, No. 0, $3.50; No. 1, $11.50; No. 2, $5.00 doz.
Wentworth's. No. 1 $3.00; No. 2 $7.50

CLAWS, TACK.

Cast, wood hdle ..... per doz. 45@60c
Forged steel, wood hdle $0.80
Solid Steel ..... " 1.00
Giant ..... " .60

CLEANERS.

Drain.
Iwan's Adjustable 55%
Iwan's Stationary ..... 40&5%
Pot.
Wire ..... per doz. $0.55
Side-walk.
Steel ..... per doz. $2.25
XLCR ..... 65&5%

CLEAVERS.

Family.
Griffin, In. 6 7 8
Per doz $5.50 $5.75 $6.25
Royal ..... per doz. 2 25
Butchers.
Beattys, Kitchen 40%

CLEVISES.

Malleable ..... 5½c ℔

CLIPPERS.

Bolt ..... $1.90@$4.75

CLIPS.

Axle ..... 65&5%
Damper.
Standard ..... per doz. 65c
Troy ..... " 38c
Hame ..... " 17c

Emery. CLOTH.

Star 50%
B. & A 50%
Hardware Wire—full rolls (100 ft.)
2 to 3 mesh black, per 100 sq. ft. $2 50
9 to 12 " " " 2 50
2 to 3 incl., Galv.—in full roll ... 4 10
4 and 5 ..... " 4 75
6 ..... " 5 00
7 and 8 ..... " 5 50
Screen Wire.
12 mesh, painted, per 100 sq. ft. 1.35

COCKS AND FAUCETS.

Compression Plain Bibbs 60%
Lever Bibb Cocks 60%
Compression Hose Bibbs. 50-10&5%
Telegraph Faucets (new list) ... 50-5%
Racking Cocks (new list) 60%
Compression Lock C'ks (n'w list) .. 70%
Andrew's Brass Faucets 70%
Angle Plug Faucets, per doz. ... $0.85
Milk Can Faucets, per doz. .. $2.60-4.20
Petroleum Faucets 75%

COLLARS, STOVE PIPE.

Inches 5 6 7
Plain Tin .... per gro. $1.90 $2.40 $3.50
Japanned Tin " 3.00 3.00 4.25
Lacquered Brass " 3.00 3.50 4.25

COMBS, CURRY.

Nos .. 000 11 15 29 89 108
Per doz. $0.37 .60 1.90 .90 1.15 .80
Nos 209 220 390 532 630 1400
Per doz. $1.05 .85 1.35 1.20 .75 1.40

COMPASSES.

Carpenters' 60-10-10%
Pencil—Faber's ..... per doz. $1.00

COPPER—See Metals.

COPPERS.

Soldering.
1 ℔ ..... per ℔ 48c
1½ ℔ ..... 33c 2 ℔ .... " 36c
3 ℔ and larger ..... " 33c

CORD.

Picture.
White Wire (new list) 85%
Sash.
Baltic Braided Flax ..... per ℔
Silver Lake, white 7-32 in. "
" " " 8-32 in. "
Keystone ..... 8-32 in. " 29c

CORKSCREWS.

Humason & Beckley 33⅓%
Walker's 33⅓%
Williamson's Regular ..... 40&10%
Williamson's Forged Worm 50%

COTTERS, SPRING.

All sizes—new list ..... 90&30%

COUPLINGS, HOSE.

Brass ..... per doz. $
Brass Plated ..... " .85

COVERS, WAGON—See Tents

CRADLES, GRAIN.

Morgan's Grapevine per ... doz.

CRAYONS—See Chalk.

CROW BARS.

inch or Wedge Point, per lbs....3¾

CUTTERS.

Glass.
Red Devil.....45¢
Smith & Hemenway Co.....50¢
Woodward.....40¢
Meat.
Enterprise Nos. 5, 10, 12, 22, 32 and 42.....25¢
No. 202, list, $1.50 ea.....40&7½¢
Pipe.
Stanwoods.. No. 1 2 3
Each..... $0.85 $1.50 $4.00
Slaw and Crout.
3-knife Crout.....per doz. $9 75
1-knife Slaw..... " 1 65
2-knife " ..... " 2 35
Washer..... " 7 75

DAMPERS, STOVE PIPE.

Standard.....50¢
American.....45¢

DIES AND STOCKS

Discount.....40¢
King's, Little Giant.....33⅓¢

DIGGERS.

Post Hole.
Acme.....per doz. $ 9 25
Atlas..... " 9 00
Eureka..... " 7 50
Hercules..... " 10 25
Iwan's Split Handle.. " 7 50
Iwan's Perfection.... " 9 00
Iwan's Hercules pattern " 10 00
Ryan's..... " 17 00
See also Augers—Post Hole.
Dividers, Wing.....65&10¢

DOOR CHECKS—See Door.

DOORS, SCREEN.

⅞ in. 4-panel painted, per doz. $7 93
1⅛ in. " " " 9 50
1⅛ in. 3-panel natural pine, fancy.....per doz. 12 40

DOOR HANGERS—See Hangers.

DRILLS.

Bit Stock.....60&10¢
Blacksmith's Twist.....60¢
Breast.
Common.....each. $2 25
Millers Falls..... " 2 10
Hand
Goodell's Automatic.
Nos.....01 02 3 20
Per doz..$7.75 $12.50 $12.50 $11 00
Goodell's Single Gear per doz. 15 75
Millers' Falls " " " 12 75
" " Double " " 15 25
Reciprocating.
Goodell's.....per doz. $16 50
Bit Stock.
Standard List...60&5¢@50¢@10¢

DRIVERS, SCREW.

Standard.....65&10¢
Lock Ferrule.....60¢
Champion.....40&10¢
" Pattern.....70¢
Clark's Interchangeable.....30¢
Edison.....60¢
Reed's Lightning.....45&5¢
Goodell's Spiral.....50, 10, 5&2½¢
Yankee Ratchet.....50¢
" " Spiral.....50&10¢
Smith & Hemenway Co.....40&5¢

EAVES TROUGH. GALVANIZED.

Territory. L. C. L.
Eastern.....70&30¢
Central.....80¢
Southern.....70&30¢
Western.....70&3 ¢
S. Western.....75&7½¢
Terms, 2¢ for cash. Factory shipments generally delivered.
See also conductor pipe and elbows

EGG BEATERS—See Beaters.

ELBOWS.

Adjustable Stove.
Inches..... 5 6 7
Smooth, per doz. $0.75 $0.85 $1.20
Plan'd " 1.80 2.00 2.65
Corrugated Conductor.
Discount.....75&10¢
Corrugated Stove.
Inches..... 5 6 7
Smooth, per doz. $0.85 $1.00 $1.50
Pol'd " 1.40 1.65 2.25
Plan'd " 2.15 2.65 3.40
Four-Piece Stove.
Inches..... 5 6 7
Smooth. per doz. 0.60 $0.65 $0.95
Planished " 1.40 1.70 2.3

EMERY CLOTH—See Cloth.

EMERY, TURKISH.

Size	5-lb. pkgs.	½ kegs.	kegs
No. 60 to 150, per lb.	6c	4c	4c
Flour "	5c	3c	2c

ENAMEL, IRON.

Nubian, ½-pt. cans.....per doz. 1 65
Peerless..... 1 25

EXTRACTORS. PIG.

See Forceps, Pig.

EYES.

Bright Wire Screw—See Goods, B. W
Drifting Pick.....60, 10&5¢
Hooks and—
Brass.....50&10¢
Iron.....70¢

FASTENERS, STORM SASH

Schroeder's..... per doz. 85
Sensible..... 1 15

FAUCETS—See Cocks.

FILES AND RASPS.

Delta.....70¢
Kearney & Foot.....75&10¢

FLUE STOPPERS—See Stoppers.

FORCEPS, PIG.

Superior.....per doz. $4 75
Whisson's Imp..... " 5 25

FORKS.

These goods are sold net this year.
Barley.
Steel, New List.....65&10¢
Wood, 4 tines, per doz.....$5.00
Coal, Coke, Cottonseed.....30¢
Hay.
2 tine.....60¢
3 " .....60&5¢
4 " .....60&10¢
Digging.....65&5¢
Scoop.....30¢
Header.
3 tine.....60&5¢
4 " .....60&5¢
Manure.
4 tine.....60¢
Ore.....40¢
Spading.

FRAMES.

Hack Saw.
Union.....per doz. $5 75
Jenning's adj..... " 7 50
Cast..... " 2 50

FREEZERS, ICE CREAM.

Arctic.
Qts..... 1 2 3 4 6
Each.....$1.10 1.30 1.50 1.80 2.30
Qts..... 8 10 12 15
Each.....$2.95 3.80 4.50 5.20
White Mountain.
20 qt., New Platform...each $19 10
25 qt., " " " 22 60
25 qt., Sampson Power " 43 50
40 qt., " " " 58 25

GAUGES.

Butt and Rabbet.
Cream Pull.
Fairmont.....per doz. $3 75
Marking, Mortise, etc......
.....50&10¢
Saw.
Wire.
Disston's.....25¢

GIMLETS.

Discount.....35@40¢

GLASS, WINDOW.

Single.....90¢
Double.....90&10¢

GLASSES, LEVEL.

GLUE.

Bulk.
B Amber.....per lb. 12 c
A White..... " 15 c
H. S. Amber..... " 16½c
Liquid.
Army & Navy.....40¢
Le Page's—
List "A".....37½¢
List "B".....33⅓¢
List "C".....25¢

GOODS.

Bright Wire.....85&15¢

GREASE, AXLE.

Wood Boxes.
Diamond.....per gro. 5 50
Frazer's..... 9 50
Hub Lightning..... 5 25
Paragon..... 75
Wood Pails.
Frazer's, 15 lb. 80c; 25 lb. $1.30 each
Hub Lightning, 15 lb. 55c; 25 lb. 70c each.
Tin Cans.
Chamellene Graphite.
1 lb. per gross.....$9 50
3 lb. per gross.....35 00
5 lb. per gross.....37 00

GRIDDLES.

Soapstone.....33⅓¢

GRINDSTONES.

Family.
Inches..... 7 8 9
Per doz.....$8.25 9.00 10.50
Loose.
Per ton.....$20 00@$31 00
Mounted.
Ball Bearing..... 1 2 3
Each.....$3.15 3 00 2.85
Common Bearing.. 1 2 3
Each.....$3.00 2.80 2.65

GUN WADS.
(See Ammunition.)

HAFTS. AWL.

Brad.
Common.....per doz. $0 19
Peg.
Common..... " 22
Patent, plain top .... " 47
" leather top... " 52
Sewing.
Common..... " 22
Patent..... " 52

HALTERS.

Jute Rope.....per doz. $1 10
Sisal Rope..... " 1 85
Web..... " 2 00
Leather, rope tie..... " 8 50
" leather tie.... " 11 50

HAMMERS, HANDLED.

Blacksmiths' Hand.
Plumbs.....60&5¢
Engineers'.
Plumbs.....60&5¢
Farriers'.
Plumbs.....40&10¢
Machinists'.
Plumbs.....60&5¢
Nail.
Plumbs.....40&7½¢
Quaker City.....per doz. $3 50
Cast..... " 1 15
Maydole's.....30&5¢
Riveting.
Plumbs.....40&12½¢
Shoe.
Cast.....per doz. 75c
Tack.
All Iron.....per doz. $0 35
Pol'd Iron, Hickory hdl. " 50
Mall. Iron, Inlaid..... " 1 55
Magnetic..... 1 2 3
Per doz.....70c 80c $1.00
Magazine.....per doz. $4 75

HAMMERS, HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs.....75&5¢
5 lbs. and over.....75-10&5¢
Masons'.
Single & Double Face.....75&5¢

HANDLES.

Auger.
Common Assorted...per doz. $0 38
Peck's Adjustable... " 2 10
Ives' " ....per set 1 35
Axe.....60¢
Chisel
Hickory, Tanged Firmer, Assorted, 33c; Large, 38c per doz.
Hickory, Socket Firmer, Assorted, 27c; Large, 30c per doz.
Applewood, Tanged Firmer, Assorted, 29c; large, 38c per doz.
Applewood Socket, Firmer, Assorted.....per doz. 24c
Coal Pick.....50&10¢
Drifting Pick.....50&10¢
File, assorted 13c, large 15c per doz.
Hammer.
Adze Eye.....per doz. 40c
Blacksmiths'.....per doz. 40c@70c
Machinists'..... " 45c@70c
Hatchet.....per doz. 40c
Hay and Manure Fork.....30¢
Hoe and Rake.....30¢

Plain.....per doz. 75c
Varnished..... " 80c
Screw Driver.
Assorted..... " 37c
Large..... " 48c
Shovel and Spade.....33⅓¢

HANGERS.

Barn Door.
Nansen.....60&10¢
Matchless.....70&10¢
Storm King.....60¢
World's Best.....50¢
Wagner's Adjustable.....70&10¢
Warehouse.....60¢
Conductor P
Griffin.....70&10¢
Iwan's Perfection.....50¢
Eave Trough.
Baker's.....per gro. $3 35
Imperial.....30¢
Wire.....33⅓¢
Parlor Door.
Acme.....per set $3 75
Ives' Improved..... " 2 50
Lane's Standard..... " 3 50
" New Model..... " 3 10
Le Roy Noiseless..... " 4 00
Richards'.....40-10&5¢

HASPS.

Hinge, Wrought.....40
With Staples—See Staples.

HATCHETS.

Crown.....50-10&5¢
Cast Claw.....per doz. $1 20@1 45
Cast Shingling.... " $0 95@1 20
Germantown.....40¢
Plumbs.....33⅓&5¢

HAY KNIVES.

See Knives.

HAY RACK BRACKETS.

Wenzleman's No. 1....per doz. $ 9 00
" No. 2.... " 9 00

HINGES.

Blind.
Clark's Gravity...per doz. sets 95c
Parker's.....65¢
Shepherd's Noiseless, for Wood casing.....per doz. 1 05
Gate.
Clark's..... 1 2 3
Hgs & Latch....doz. $2.50 2.90 4.00
Hinges only.... " 1.90 2.20
Latches only... " .70 .75
Knuckle.....per doz. prs. $6 00
Leed's..... " sets 6 75
Superior..... " prs. 9 50
Spring.
American.....30¢
Chicago.....25&5¢
Columbia Dbl. Acting....40&10&5¢
Gem.....35¢
Ideal Detachable....per gro. $11.10
Matchless.....30¢
New Idea.....per gro. $8 00
Oxford.....30¢
Wrought Iron.
New Lists.....
Griffin
Light Strap Hinges.....60¢
Heavy Strap Hinges.....65¢
Light T Hinges.....55¢
Heavy T Hinges.....45¢
Extra Heavy T Hinges.....60¢
Screw Hook and Strap.
6 to 12 in.....per 100 lbs. $3 75
14 to 20 in..... " " 3 65
22 to 36 in..... " " 3 40
Screw Hook and Eye.
⅝ in.....per 100 lbs $6 75
⅞ in..... " " 7 75
⅞ in..... " " 9 75

HOES.

Garden.....70&10¢
Grub.
Extra.....70¢
Hazel.....per doz. $5 00
Ladies' and Boys'.....75¢
Mortar.....75&10¢
Planter's Eye.....62½¢
Weed.....75&15¢

HOLLOW WARE—See Ware

HOOKS.

And Eyes.
Brass.....50&10¢
Iron.....65&10¢
Awning.....per gro. $1 00
Belt.
Brown's.....70&10¢
Jones'.....65&10¢
Bench.
See Stops, Bench

Box.
Inch..... 6 8 10 12
Per doz.....$1.35 1.65 1.75 2.30
Humason & Beckley's, per doz. 2 50
(See Goods, Bright Wire.)
Bush.
Common Axe Handle, per doz. $7 00
Chain.
Inch... ¼&5/16 ⅜ 7/16 ½
Per 100 $7.60-8.10 9.75 11.50 13 60
Clothes Line.
Japanned.....per doz. 22c@24c
Galvanized..... " 40c
Coat and Hat.
Cast Iron .....per gro. 72c@$1 50
Gem Wire.....70¢
Conductor.
Malleable.....50&10¢@50&10&5¢
Wrought .....40&10¢@50¢
Corn.
Common, unpolished, per doz. $1 35
" polished.... " 1 80
Cut Easy"......" 2 75
Cut.
See Goods, Bright Wire.
Grass.
Common. Nos..... 2 3 1
Per doz.....$1.50 1.60 1.70
German.....per doz. 1 75
Little Giant..... " 2 75
Hammock.
With Plate.....per doz. 50c
With Screw..... " 45c
Lambrequin, or Drapery, per gro. 21c
Picture .....50¢@50&10¢
Potato and Manure.....70&12½¢
Screw.
Brass.....80&5¢
(See Goods, Bright Wire.)
Seat Spring.....per ℔. 5½c

HOOPS, TUB.

Elastic.....per case of 2 doz. $1.50

HOSE, GARDEN.

Coupled per ft.
Heron-3ply-¾" guar. press. 55 lbs. 7½c
Crane " " " 75 " 8½c
Falcon " " " 95 " 9½c
Eagle " " " 120 " 10½c
Condor " " " 150 " 11½c
High Test " " " 200 " 12½c

COTTON COV. RUBBER HOSE

High Grade-¾"-guar. press 400 lbs. 11½c
Special " " " 300 " 9½c
Leader " " 100 " 7½c

HUSKERS.

Boss.
Nos..... B BB E 200
Per doz..... $2.00 2.00 1.75 .80
Nos..... L PP P K
Per gro..... $5.40 6.00 6.00 10.50
Nos..... 2000 3000 O
Per gro..... $3.50 9.00 24.50
Nos..... 60 59 64 68
Per doz..... $2.15 2.15 .85 1.45
Brinkerhoff's.
Per gro.....$14 40
Clark's
Nos..... 1 63 200 400
Per doz..... $0.40 .75 .75 1.75
Nos..... 300s 40s 3s 4s
Per doz..... $0.85 .50 1.25 1.25
Nos.....A AB F
Per doz.....$3.00 $4.25 $2.50

IRON.

See Metals—First column.

IRONS.

Curling.
X..... per doz. $0 40
Y..... " 50
Z..... " 55
Jewel..... " 85
Imperial ..... " 1 00
Pinking ..... " 70
Plane.
Wood Bench..... ....20&5¢
Sad.
Charcoal .....per doz. $11 00
Common, Polished, per 100 ℔. 4 50
" Nickel plated, 5 25
Chinese Polishing.....per doz. 7 40
Laundry. No. 1 ..... " 5 75
" No. 2 ..... " 6 25
Mrs. Pott's,
No. 50 J, Enterprise...per set 98
No. 55 J, " ... " 90
No. 50 T, " ... " 1 00
No. 55 T, " ... " 96
No. 50, Bless & Drake " 93
No. 55, " ..... " 99
Tailors' Sad.....per ℔. 5½
" Geese ..... " 5½
Tuyere.
Single Duck Nest.....per doz. $5 25
Double " " ..... " 6 25
Sutton .....each 2 60

JACKS.

Locomotive..... 70¢
Wagon.
Oliver
Nos 6 00
Eaton..... 8.60 $0.80

Standard.
Nos..... 1
Each..... $0.60 1.00
Wilcox.
Nos..... 1 2 3
Each.....$0.85 1.20 2.90

KETTLES.

Brass.....15¢
Cauldron .....40&5¢
Copper.....per ℔. 27c
Maslin .....65¢
Sugar .....50¢

KNIVES.

Butt Topping.
Clyde, 9-in. Scimiter Blade, dz. $3 85
California.....3 40
Cooper's Hoop.....15¢
Corn.
Clipper.....per doz. $1 75
Disston's..... " 2 75
Earle's..... " 3 00
Woodford..... " 2 25
Drawing.
Standard .....70¢
Adjustable.....15¢
Barton's Carpenters'.....10¢
Folding Handle.....25&5¢
Hay.
American, Sickle Edge..doz $10 50
Canton, Sickle Edge..... " 8 25
Heath's ..... " 8 00
Iwan's Sickle Edge..... " 9 50
Iwan's Impv'd Serrated.. " 10 00
Lightn'g, Holt's Genuine " 6 50
Lightning Pattern..... " 6 00
Wadsworth's Sp'r Point " 8 50
Hedge.
Challenge .....per doz. $6 00
Disston's..... " 3 75
Mincing.
Common, Single 40
" Double ..... " 50
Streeter, 4 Blade..... " 1 30
" 6 Blade..... 2 00
Putty.
Common..... " 60@1 00
Lander's..... per doz. $1 40@1 75
Scraping.
Beech Handle.....75@1 00
Lander's.....5 25@6 00

KNOBS.

Door.
Mineral .....per doz. $0 75
Porcelain ..... " 83
Jet..... " 83

LADDERS.

Common Long.
Per ft .....3c@14c
Extension.
Per ft 14c
Step.
Common, per ft.....7½c
" with Shelf, add 10c.
Keystone.....15c
Triumph, per ft 20c

LANTERNS.

Bull's Eye Police.
3-in. Flash Light.....per doz. $6 00
2½-in. Regular..... " 4 91
3-in. Regular..... " 5 50
Tubular.
Buhl.....net prices

LEADERS, CATTLE.

Nos..... 1 2 3
Per doz.....$0 55 $0 70 $2 75

LEATHER, LACE.

Out.....33½¢
Glass.
Ex. Quality.....per sq. ft. 27c

LEATHERS, PUMP.

Valve and Plunger .....10¢

LIFTERS.

Stove Cover.
Coppered.....per gro. 1 75@3 65
Ideal..... " 5 50
Alaska, Coppered " 4 00
" Nickeled. " 5 00
Transom.
Payson's.....80¢

LINES.

Chalk.
Twisted in 20-ft. hanks.
Nos..... 4 6 7 8 9
Per gross $1 50 2 00 2 25 2 50 3 00
Twisted in 50-ft. balls.
Nos..... 1 2 3 4
Per doz.....25c 30c 35c 41c
Braided in 20-ft. hanks.
Nos..... 0 1 2 3
Per doz.....22c 25c 31c 35c
Masons in 100-ft. hanks..doz... 80c
Clothes.
60-ft. Jute.....per doz. $0 95
72-ft. " ..... " 1 15
60-ft. Sisal ..... " 1 40
72-ft. " ..... " 2 15
50-ft. Cotton ..... " 1 15
50-ft. Braided Cotton. " 25

LINING, STOVE.

Ir. Bricks.....per crate 42c

MACHINES.

Boring.	Without Augers	With Augers
Angular.....per doz.	3 00	4 40
Upright.... "	2 60	4 00

Leather Riveting.
Chicago, Pomeroy....per doz. $9 00
Excelsior ..... " 2 00
Handy ..... " 2 00
Little Giant..... " 3 00
Pony, Pomeroy..... " 7 20
Washing
Winner.....per doz. 54 00
Keystone ..... " 54 00
U. S. Steel..... " 60 00
Advance, f.o.b. Chic'go " 24 50

MAIL BOXES.

See Boxes.

MALLETS.

Carpenters'.
Fibre Head, Small ...per doz. $5 00
" " Medium. " 5 75
" " Large... " 7 00
Round Hickory..... " 2 00
" Lignumvitæ .. " 3 00
Square Hickory..... " 2 00
" Lignumvitæ.. " 3 75
Tinners'.
Applewood ..... " 1 70
Hickory..... " 75@1 15
Hickory Sheet Iron.. " 1 30

MATS.

Door.
National Rigid.....50, 10&5¢
Acme Steel Flexible.....33⅓¢
Stove.
No. 3. .....per gross. $3.25
No. 1. ..... " 3.50
No. 1 Asbestos Toasters, or wire-covered Stove Mats, with handle.....per doz. 1.10
No. 2 Asbestos Toasters, with ring.....per doz. .60

MATTOCKS.

Plumbs.....65&10¢
Extra .....60¢

MAULS.

Iron. lbs. 10 13 16 1
Per doz. $4.00 4.50 5.25 5.60
Wood face, lbs. 10 12 14
Per doz $5.00 5.50 6.00
Wood Choppers'.
Lake Super'r & Oregon Pat. 75&10¢

MEASURES.

	½ pk.	1 pk.	bu
Galvanized, per dz.	$2.25	$3.00	$3.85
Japanned... "	1.75	2.45	3.15

MICA.

First Quality.....20¢
Second Quality.....25¢

MILLS, COFFEE.

Enterprise .....25¢
Parker.....40 12½&2½¢
Arcade .....40-12½&2½¢

MITRE BOXES.

See boxes.

MOPS.

Iris.....per doz. $3 15
Handled Cotton.
Pounds..... ¾ 1 1¼ 2
Per dozen...$2.00 2.35 2.65 3.25

MOWERS, LAWN.

Ball-Bearing.
Inches..... 14 16 18 20
Each $6.25 6.75 7.25 8.00
Cheap Grades.
Inches..... 12 14 16 18
Each $2.25 2.25 2.25 2.50
Clipper .....50, 10&10¢
Yale.
Inches..... 4 16 18 20
Each.....$3.50 3.75 4.00 4.35
Philadelphia.
All Styles Except A & E 60, 10&10¢
Style A.....50&10¢
Style E, High Wheel.....60,10&10¢
Drexels.....40¢
All Day.....Net Price

NAILS.

Cut Steel.....rates, $2 50
Cut Iron.....2 60
Wire.
Small Lots.....$2 40
Carload " 2 35
Cement Coated..... 2 30
Horse Shoe.
Ausable .....55&5¢
Capewell .....15¢
Perfect .....55&5¢
Putnam. .....20-5¢
Star.....35&5¢
Clover Leaf..... per lb. net, 10½c
Picture.
Brass Heads.....25¢
Brads.....85¢
Furniture .....15¢

NAIL PULLERS.

See Pullers.

NAIL SETS.

See Sets.

NETTING, POULTRY.

Galvanized before Weav'g ..80&10¢
" After Weaving ....80&5¢
Cut Pieces.....65&5¢

NIPPERS.

End Cutting.
Stubb's Pattern. Ins. 5½ 6
Per dozen $4.00 $4.25
End and Diagonal Cutting.
Swedish Side.....75¢
Utica Drop Forge & Tool Co...60¢
Hoof.
Heller's .....40&10¢
V. & B.....55-5¢

NOZZLES.

Hose.
Genuine Gem.....per doz. $3 90
Magic..... " 3 50
Mystic..... " 3 60

NUTS, HOT PRESSED.

Square Blank.
In. ¼ 5/16 ⅜ 7/16 ½ ⅝
℔. 9½c 8c 6½c 5½c 5½c 5c 4½c
Square Tapped.
In. ¼ 5/16 ⅜ 7/16 ½ ⅝ ¾
℔. 12½c 10½c 8c 7½c 6½c 6½c 6c
For 5 lb. boxes add ½c per ℔. to above prices.

OILERS.

Chase Pattern
Brass and Copper.....60¢
Zinc..... .....60¢
Engineers'
Cannon.....55¢
Tin.....per doz. $2.00@$2.25
Machine.
Common .....per doz. $0 50
Copper Plated Steel.. " 85
Malleable Iron.....60, 10&5¢
Jappaned.....65@75c

OPENERS.

Box.
Inches..... 10 12 14
Flat...per doz $2.85 3.60 4.15
Round " 2.10 2.25 2.75
Can.
Delmonico.....per doz. $1 30
Never Slip..... " 0 65
Crate.
V. & B..... " 5 75

OUTFITS, COBBLING.

Combination.....per doz. $11 00
Economy..... " 4 65
Family..... " 9 75

PADLOCKS.

Standard Wrought .....70&5¢
Champion .....50¢
Eureka.....40, 10&5¢
Yale .....60&5¢

PAILS.

Cream.
14-qt., without Ga....per doz. $2 50
20-qt., " " .... " 3 00
20-qt., with Gauge.... " 3 50
Sap.
10-qt., Galvanized..per 100.. $13 00
12-qt. " " .. 14 50
14-qt. " " .. 16 25
16-qt. " " .. 17 75
10-qt., IC Tin..... " .. 10 25
12-qt " " .. 11 75
14-qt. " " .. 13 00
10-qt., IX Tin..... " .. 12 75
12-qt. " " .. 16 00
14-qt. " " .. 17 00
Stock
Galvd. qts. 14 16 18 200
Per doz.....$3.75 4.00 4.75 5.25
Water.
Galvanized, qts 10 12 14
Per doz $1.95 2.20 2.45
Wood.
Cable, 3-Hoop.....per doz. $1 70
" 3-Hoop..... " 1 90
Cedar, 3-Hoop..... " 2 25
Standard, 2-Hoop..... " 1 60
" 3-Hoop..... " 1 80

PANS.

Dripping.....60&5¢
Fry.
Common.....75&10¢
Acme.....70¢
Roasting.
Paxton.
Nos..... 1 2 3 4
Per doz. $4.75 $5.75 $6.50 $7.50
Neverburn.. 4.00 4.50 5.50 6.
Savory No. 200 .....per doz 8.

PAPER.

Building.
Plain .....per 100 lbs. $1 25
Tarred..... " 1 35
Tarred Felt..... " 1 65
No. 20, Red Rosin.....pr roll 40
No. 30, Red Rosin ..... " 55
Sand and Emery.
Star.....low list..50¢
B. & A.....50¢
Wrapping
Drab Floor.....per
Rag.....

PARERS

Apple.
Bay State.....per doz. $13 00
Turntable ..... " 00
White Mountain .... " 4 75
Reading..... " 6 50

Potato.
Goodsell's Saratoga 10½ in. doz. 6 50
" " 5 in.. " 5 50

PICKS.

Adze Eye Ore 70%
Drifting and Poll Picks..... 70%
Plumbs Railroad 70%
Surface.....70%

PINCERS.

Carpenters', cast steel.

In.	6	8	10	12
Per doz.	$1 80	$2 40	$2 80	$3 50

Blacksmith's 45%
Heller's 40%

PINS.

Clothes.
Common.....per box of 5 gro. $0 52
Hoyt's..... " " 31
U. S..... " " 70

Picket.
Fluted 15 in.....per doz. $0 70
" 21 in..... " 1 60
Spiral 1 90

PIPE.

Conductor.
Territory.
Eastern.....70%
Central.....70&5%
Southern.....70%
Western.....70%
Southwestern..... ....65&5%

Lead.
Full coils.....per ℔. 7½c
Cut " ..... " 7½c

Stove.

Acme—In.	5	6	7
Smooth, per jt..	8½c	9½c	10½c
Planished " ..	32 c	33 c	43c
Peerless—Smooth.	7½c	8 c	9½c
Polished	14½c	15½c	18c
Plan'hed	28 c	31 c	35½c

Made-up—In.	5	6	7
Smooth	7½c	8c	9½c

7 to 6 in. Smooth Tapers, pr jt..13c
6 in. Smooth T's..... " ..27c
7 to 6 in. Planished Tapers.....45c

Yale Patent Lock Pipe—Stove.

	5"	6"	7"	7" to 6"
Blue Steel.	—Cents—			
Battle Axe Blue	7	7¾	9½	10½
Can't Slip "	7½	8½	10	11
Peerless "	7½	8½	10	11
Duplex "	10	11	13	14
Yale Rus. Fin.	15	16	17	18
DuplexPlan'h'd	29	31	37	38
Galvano, Gal.	15	16	17	18

If wanted made up, add per joint for grooved, 1c; riveted, 1½c. Crating made-up pipe extra.

Wrought Iron Gas Pipe
¼⊖½-in., black.....discount, 60%
¾⊖1-in. ..... " 60,10&5%
1¼-in. to 6-in.. black... " 70%
7 " 12 " .. " . 62½%
⊖¼ galvanized " 42%
⊖½ " " 50%
¾ " 6 " " 57½%
7 " 12 " " 45%

PLANES.

Sargent Iron Bench.....60%
Stanley Iron Bench.....35&5%

PLANTERS.

Corn.
Monitor.....per doz..$7 75
Triumph..... " .. 6 00
Segment..... " .. 9 00

Potato.
Acme.....per doz..$6 25
Challenge..... " ..11 00
Pingree..... " .. 2 25
Eureka ..... " .. 6 25

PLATES, TIN.

See Metals in Column 1.

PLIERS.

Button's—In.	4½	6	8	10
Per doz.....	$2.75	$3.35	$4.15	$5.15

Button's Pattern.

In.	4½	6	8	10
Per doz.....	$2.25	$2.75	$3.25	$4.25

Cutting.
Bernard's.....30%
Lodi.....50%

End and Diagonal Cutting.
Swedish Side 70%
Utica Drop Forge & Tool Co....50%

Fencing.
Farmers' Choice....per doz ..$8 00
Russell's..... " .. 8 25

Flat and Round Nose.
Bernard's.....30%
German 65%
Lodi.....50%
Paragon.....50%

Gas—In.	6	8	10	12
Per doz...	$2.35	$3.00	$4.00	$5.0

Tinner's.
Hollow.... .....40%
Solid.....each..5½c

PLUMBS AND LEVELS.

Common.....60&10&10%
Cook's.....40%
Davis' Iron.....35%
Davis' Inclinometer.....15%

POINTS.

Drive Well Points.....75&5%

POKERS—STOVE.

Wr't Steel, str't or bent, pr doz.$0.55
Wr't Steel, wood hand'le " " .80
Nickel pl'td, coil hdl's.. " " .65

POKES—ANIMAL.

Cracker Jack, wr't steel, per doz.... .....$4.50

POLISH.

Metal.
Pride of the Bar.....$1.60
Putz Cream.

Pts.	1-6	½	1
Per doz.....	$0.80	$1.10	$1.65

Pts	1	2	8
Per doz	$2 75	$4.50	$7.50	$12.50

White Silk half pints, per doz.$3.00
White Silk, 6 oz. cans, per doz. 1.00
Wondershine

Pts.	1-6	½	1	2
Per doz.....	$0.70	$1.35	$2.25	$3.00

George William Hoffman.
U. S. Metal Polish Paste, 3 oz. boxes, per doz., 50c; pr. gro..$4.55
½-lb. boxes, per doz..... 1.20
1-lb. boxes, per doz..... 2.25
U. S. Liquid, 8 oz. cans, per doz., $1.25; per gro.....12.00
Barkeepers' Friend Metal Polish, per doz., $1.75; per gro..18.00

Shoe.
M. D. C.....per doz. 35c@50c
F. C. O..... " 40c
T. M..... " 55c@$1.75
Imperial.....per gr.....$5.00

Stove.
Black Eagle, 1 ℔ cans. pr gr..$15.00
Black Silk—
5 ℔. pail.....$0 70
Paste, 5 oz. cans....per doz. 75
Paste, ½ lb. cans.... " 1 05
Liquid, ½ pint cans..per doz $1 00
Liquid, 6 oz. cans... " 75
Steel Range Gloss.... " 1 75
Blackene, 1 ℔ cans....pr gro. 13 00
Black Jack, ½ ℔ cans.. " 9 25
Dixon's Carb. of Iron.. " 5 75
Nickel Plate..... " 4 50

POPPERS, CORN.

Round or Square, 1 qt. per dz, ..$1 05
Square, 1½ qt..... " 1 15
Square, 2 qt..... " 1 35
2 qt. Reversible..... " 1 60

POTS, FIRE.

Bernz.....each $3 85
Clayton & Lambert's, ea..$4 75@6 25
Gate City.....each 6 25
Gem.....ea..$6 75@8 50

POWDER.

See Ammunition.

PRESSES, FRUIT AND JELLY.

Enterprise Manufacturing Co....25%
Menis .....per doz. $1 85

PRIMERS.

See Ammunition.

PRUNERS.

Disston's Pole.....per doz. $6 50
Henry's Improved..... " 75&10%
Water's Improved..... " 80%

PULLERS.

Cork
Daisy.....each $3 10
Phoenix..... " 1 40
Quick and Easy..... " 2 70

Nail.
Giant.....per doz..$10 50
Giant Pattern..... " .. 6 00
Jumbo ..... " .. 9 00
—Glan *Tackt*..... " .. 40

PULLEYS.

Awning—Jap'd.....60%
Clothes Line.....50&10%
Hay Fork.
Iron Wheel, 5 in.....per doz. $1 75
Wood Wheel, 6 in.... " 1 75
Wood Wheel, 6 in., pass knot..... " 2 15
Hot House—Jap'd .....50&10%
Screw..... " 60%
Side ..... " .....50&10%
Sash.
Common.....per doz $0 20
" Sense, 2 in .. " 20
Empir Pattern. 2 in.. " 20
Ideal..... " 20
Steel ..... " 25

PUMPS

Pitcher Spout.

Nos.	1	2	3	4
Each	$1.10	1.23	1.40	1.85

Spray.
Blizzard.....per doz. $14 50
Cyclone, tin..... " 3 40
" copper ..... " 6 75
Daisy..... " 9 00
Little Giant.....each 2 25

PUNCHES.

Conductors'.
No. 22.....per doz. $2 25
Machine.....per ℔. 19
Saddlers'.
Common.....per doz. 60c@70c
Good..... " 72c@84c

PUTTY.

In Bladders.
Strictly pure.....per 100 ℔s. 2 35

RAIL.

Barn Door.
Matchless, 1 in..... ..... 3c
Matchless, 1½ in..... 3½c
Storm King..... 4c

Sliding Door.
Painted steel.....per ft. 4½c
Bronzed wrought iron... " 8½c

RAKES.

Coal or Wood.....per doz. $5.20
Garden.
Steel.....70&10%
Steel, bow.....70&10%
Malleable Iron, heavy.....70&5%
Hay.
Wood.....$1.50@$3 00
Lawn—Wood.
XXX .....per doz. 3 00
Automatic ..... " 5 25
Lawn Queen..... " 3 35
Jumbo, 36 teeth..... " 5 50

RASPS—See Files.

RAZORS.

Bo-ras-ic 50%
Red Devil.....50%
Tree Brand.....50%

REGISTERS.

List December 5, 1904.

Black and White Japanned.....66⅔%
Nickel Plated.....66⅔%
Electroplated, Brass, Bronze or Copper.....66⅔%

RINGS

Bull.

Copper.....	2½ in	3 in.
Per doz.....	$1.50	$2.00

Rea's Impro'd Self Piercing

copper, pr d's.	2.00	
Steel per doz..	.85	.95
Nickel Plated	1.35	...

and Ringers—Hog.
Blair's Rings.....per doz. $0 58
Blair's Ringers..... " 75
Brown's Rings..... " 50
Brown's Ringers..... " 80
Champion Ringers... " 1 60
Hill's Ringers..... " 70
Hill's Ring, boxes..... " 47
Major Rings ..... " 60
Perfect Ringers..... " 95
Wolverine Rings..... " 1 40
Wolverine Ringers... 80
Fruit Jar.
White.....per ℔ 30c
Key.
Split, round.....per doz. 17c
Split, square..... " 22c
Ball, Round..... " 22c

RIVETS.

and Burrs.
Copper Belt 10%
Coppered Iron .....60&10&5%
Tinners' .....60&10%
Hame .....per ℔. $0 10
Slotted Clinch.....per doz. 40c@45c
Tubular.
Nos. 1 and 2 assorted sizes, doz. 45c

RIVET SETS.

See Sets.

ROPE.

Cotton.
¼, 5-16-in. Com. on reels..per ℔. 11½c
¼, 5-16-in. Com. in coils .. " 12c
¼, 5-16 Imperial in coils . " 21c
Sisal
1st quality.....12 c
Hardware Grade, rates.per ℔. 10 c
Pure Manila.
1st quality..... " 15½c
Hardware Grade, rates. " 14½c

RULES

Boxwood.....50&10%
Ivory .....

SASH WEIGHTS.

See Weights

SAWS.

Back.
Disston's 35%
Jackson's.....35%

Butchers'.
Disston's.....30%

Circular.
Disston's.....50%
Hiles'.....50&10%

Compass.
Common.....per doz. $1.35@$1.80
Disston's.....35%

Cross-Cut.
Disston's.....45%

Dehorning.
Disston's..... " 5 75

Hack.
Disston's.....35%
Keystone.....30%

Hand and Rip.
Brown's 30%
Disston's No. 7.....30%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120 (new list) 35%
Keystone.....30%
Enterprise, hand.....per doz.$5 00
Our Saw, hand..... " 4 00
Our Saw, rip..... " 4 50

Keyhole—Disston's.....35%

Kitchen.
Sterling.....35%
One Man 50%

Panel.
Brown's.....30%
Disston's No. 7.....30%
Disston's No. D100.....35%

Pruning.
Brown's.....35%
Disston's..... ..5%

Wood.
Common.....per doz. $4 50
Clover Leaf..... " 6

SAW BUCKS—See Bucks.

SAW SETS—See Sets.

SAW TOOLS—See Tools.

SAW FRAMES.

Common, plain.....per doz. $1 35
" painted.... " 1 70

SCALES.

Counter.
Pelouze..... .....40&10%
Platform.
Osgood.....50%

SCOOPS.

Grain.
½ Bu. "Hercules,"..per doz. $12 70
1 " " " 15 00

SCRAPERS.

Box.
Triangular..... 4 00
Cabinet.
Cast Steel..... " 60c@75c

Load.

Cubic ft.	7	5	3
Without runners, ea.	$4.00	3.75	3.50
With runners.... "	4.25	4.00	3.75

SCREWS.

Bench.

Iron, in,.....	1	1½	1¾
	$3.50	$4.00	$4.75

Wood, white maple..per doz. $3 50
Hand—Wood.....10%
Hand Rail.....80&10%
Jack.....70&10&5%
Lag or Coach—all sizes, gimlet pointed..... ....75&5%

Saw—Centennial.

Nos.	1	2	3	4	5	6
Per doz.	18c	20c	26c	30c	33c	35c

Wood.
F. H. Bright.....87½&5%
R. H. Blued.....85%
F. H. Jap'd.....82½%
F. H. Brass.....85%
R. H. Brass.....80%
R. H. Nickel Plated.....75-10%

SCYTHES.

Clipper, grain.....per doz $ 9 56
Clipper, grass .... " 6 27
Clover Leaf Dutchman " 6 00
Honest Dutchman..... "
BeVe B.....

SHAVING SETS.
Smith & Hemenway.....60%

SETS.
Nail.
Round, common.....per doz. $0 33
Square, " ..... " 43
Octagon " ..... " 33
No. 5 Square,..... " 75
Cup Point, knurled pr. doz.....75
Steel.
Farmers'.....per doz. $1 20
Tinners'.....50&10%
Saw.
Aiken's Pattern.....per doz. $3 50
Common Lever..... " 1 20
Disston's Monarch... " 6 50
" X Cut..... " 12 00
German ..... " 1 05
Morrill's Old Style... " 5 00
" Pattern.... " 3 25
Leach's..... " 80
Nash's Hand..... " 3 15
" X Cut..... " 4 20
Stillman's Lever..... " 1 30
" X Cut..... " 2 50

SHARPENERS, SKATE.
Diamond.....per doz. $1 60
Smith & Hemenway.....20%

SHAVES, SPOKE.
Iron.....per doz. $1.10@$1.85
Wood..... " 2.75@ 4.75
Bailey's.....50&5%
Goodell's.....15%

SHEARS
Pruning.
Buckeye, No. 1.....per doz. $5 75
" No. 2..... " 7 40
California Pat.. 9 in.. " 3 20
" " 10 in.. " 4 00
Draw Cut, No. 3..... " 13 75
" " No. 4..... " 16 50
Henry's Pat. 0 01 14 012
Per doz.....$1.40 $2.10 $2.90 $2.80
Star.....per doz. $4.00
Sheep—No. BBA.
Inches..... 6 6½ 7
Reg. Grip..... $11.25 $11.50 $12.00
Nar. Grip, doz. 11.00 11.25 12.25
Tinners'—See Snips.

SHEAVES, SLIDING DOOR.
Common.
Inches..... 3 4 5
Per set.....$0.34 $0.42 $0.70
Hatfield's.
Per set..... .75 1.00 1.60

SHELLS—See Ammunition.

SHELLERS, CORN.
Union..... per doz. $6.75

SHIELDS.
Expansion Bolt Shields.....50&10%

SHOES.
Conductor .....60&10%

SHOE POLISH—See Polish.

SHOT—See Ammunition.

SHOVELS AND SPADES.
Coal.
No. 2 Woodford .....per doz. $5 50
No 182. ..... " 6 00
Ames' new list.....Discount 12½%
Per Doz.
Neverbreak, hollow bck, blk. $15 75
National.... " " " 14 75
Buckeye .... " " " 10 00
Mohawk.... " " 9 00
Drain.
Iwan's Perfection.....50%
Railroad, Etc.
Black Diamond.....per doz $1 50
Crescent..... " 5 75
Keystone..... " 8 75
Star..... " 4 75
Vaterland..... " 9 50
Hollow Back..... " 4 75
Ame's new list.....Discount 12½%
Snow.
Per doz.....$1.65@$9.00
Alaska Steel.
D Handle.....per doz. $3 50
Long Handle ..... " 3 00

SINKS.
Cast Iron.
Painted.....50&10%
Enameled, White.....50&10%
Wrought Steel.
Painted, new list.....40-10&5%

SLEDGES—See Hammers.

SNAPS, HARNESS.
Champion.....33⅓%
German Pattern.....30&5%
Judd's Pattern.....50%

SNATHS.
Double Ring, Bush.....per doz. $6 00
Patent Loop " .... " 5 75
" " Grass..... " 5 50

SNIPS, TINNERS'.
Wiss.....40%
National.....40&10%

SOLDER—See Metals.

SPRINGS, DOOR.
Perfect.
Nos..... 1 2 3 4
Per doz....30c 35c 40 54c
Reliance.
Per doz.....light $1.25; heavy $2.50
Star.
Per doz..... light 90c; heavy $1.35
Torrey's.....per doz. $1.35
Warner's No..... 11 13
Per doz..... 75c $1.35

SQUARES.
Steel and Iron.....70%
(Add for lung, $2.50 per doz., net)
Mitre.
Try.
Try and Bevel
Try and Miter.
Fox's.....per doz. $5.75
Winterbottom's 70%

SQUEEZERS, LEMON.
Common Wood.....per doz $0 70
Porcelain Lined, Wood. " 1 25
Boss, malleable iron.... " 1 20
Iron Frame, p re 'n bowl " 1 9
" glass bowl.. " 2 35
Little Giant, tin'd iron. " 4 00
Drum, japanned..... " 3 60
Drum, nickel plated.... " 4 50

STAPLES.
Blind.
Barbed.....per ℔ 9½@9½c
Butter Tub..... " 8@8½
Fence—less than carload.
Polished.....per 100 ℔ $2 30
Galvanized ..... " 2 60
Netting.
Galvanized.....per 100 ℔ 4 00
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples.....80-10&10%
Extra heavy.....75&10%

STEELYARD.
Discount 25%.

STONES.
Axe.
Hindostan.....per ℔ 5½@7c
More Grit..... " 9½c
Washita..... " 17 c
Emery..... 60%@60&5%
Oil—Mounted.
Arkansas Hard.....per doz. $22 00
Arkansas Soft..... " 15 50
Hindostan .....per ℔ 6½@8½
Oil—Unmounted.
Arkansas Hard.....per ℔ $2 05
Arkansas Soft..... " 1 10
Lilly White..... " 45
Queer Creek..... " 15
Ouachita..... " 38
Washita..... " 26
Sythe.
Black Diamond.....per gro. $8 00
Crescent..... " 4 25
Gem Corundum..... " 7 50
Green Mountain..... " 4 50
La Motte..... " 7 00
Quinnebog..... " 5 00
Red End..... " 3 75

STOPS, BENCH.
Hotchkiss'.....per doz. $3 50
Stearns'..... 4 75

STOPPERS, FLUE.
Common.....per doz. $0 40
Crown..... " 45
Gem, flat, painted..... 85
Gem, cor'd, decorated.. " 70
Kirch's..... " 90
Perfect..... " 70@85
Skinner's Common Sense " 80

STOVE PIPE—See Pipe.
STOVE BOARDS—See Boards.
STOVE POLISH—See Polish.

STRAPS.
Scoop.....per doz. prs. $1 85
Skate..... " " 60@70c

STRETCHERS.
Carpet.
Bullard's.....per doz. $3 90
Exelsior ..... " 5 25
Malleable Iron..... " 70
Perfection..... " 6 30
King..... " 4 50
Wire.
N. S. Elwood's..... " 6 00
O. S. Elwood's..... " 6 00
Little Giant..... " 5 75
Safety ..... " 10 00
Star Lever..... " 6 25
Canton Tackle Block. " 9 50
Warner's ..... " 6 25

SWIVELS.
Malleable Iron.....per ℔ 07
Wrought Steel.....per gro. $4 50

TACKS.
American Cut.....90&15%
American Wire.....85&20%
Bill Posters Cut.....90&20%
Blued Carpet .....90&10%
Tinned Carpet.....90&10%
Gimp.....90&10%
Upholsters' Cut .....90&20%
Upholsters Wire.....90&10%
Double Pointed.....90%
Copper.....per ℔ 33c
Canvas Nails.....75&5%
Clout Nails .....75&10%
Hungarian Nails.....80%

TAPES, MEASURING.
Asses' Skin.....40&10%
Bend Leather.....20%
Patent Leather.....20%
Lufkin's Steel.....25%
Lufkin's Metallic.....30%

TEE BEVELS—See Bevels.

THERMOMETERS.
Tin Case.....per doz. 80c@$1 25
Wood Back..... " $2.00@12 00
Glass..... " 12 00

TIES.
Bale.
Single Loop.....80&5%
Other kinds.....70%
Cow—See "Chains."

TOOLS, SAW.
Disston's Universal.....40%
Miniature.
Smith & Hemenway.....25%

TRAPS.
Fly.
Balloon.....per doz. $1 25
Harper's..... " 1 35
Game.
Newhouse.....40&10%
New Victor.....70&10%
Mole.
Reddick's.....per doz. $6 00
Mouse and Rat.
Wood Choker...per doz. holes $0 13
Tin Choker..... " " 75
Delusion.....per doz. 1 15
Marty Rat..... " 6 25
Marty Rat Imitation.. " 3 50
Marty Mouse..... " 3 00
Marty Mouse Imitation " 2 00
Hold-em, wire rat.... " 3 75

TROWELS.
Brick.
Clover Leaf.....30%
Brade's.....15&5%
Disston's.....30%
Rose's.....30%
Plasterers.
Clover Leaf.....40%
Disston's.....25%
W. & McP.....25%

TRUCKS.
Bag.....each $2 75
Handy..... " 1 85
Warehouse.....50&10%
No..... 1 2 3
Half Ironed.... $3.00 $3.85 $5.50
Full Ironed.... 3.45 4.50 6.45

TUBS, WASH.
Standard, Wood
Nos..... 3 2 1 Ex. large
Per doz....$5.00 $6.00 $7.00 $ 9.50
Dowell.
Per doz.... 5.35 6.35 7.00 9.50
Cedar.
Per doz.... 6.10 7.10 7.90 10 80
Indurated.
Per doz.... 8.55 9.45 10.80 13.50
Galvanized.
No 2 3
Per doz.....$6.00 $6.75 $7.75

TWINE.
Per ℔
3-ply Cotton Wrapping.....35c
4 " " " 25c
4 " " Extra Wrapping.....27c
4 " " " Hvy. Wrapping..25c
4 " " Wrapping on tubes...27c
3 " " " " cones...25c
4 " " " " " ...25c
India Hemp, ½-lb. balls.....19c
" " ¼-lb. " 18c
" " ½-lb. " .....doz. 75c
2-ply Jute, ½-lb. " 14c
3-ply " ½-lb. " 13c
Jute Wrapping, ½-lb. balls.....14c
Jute Wool, 1-℔., balls.....9½c
Seine
Nos..... 9 12 15+
Soft.....per ℔ 26½ 26 25
Med..... " 26½ 26 25
Hard 27 26½ 26
Staging, ½-lb. ball, size 21.....26½c
" " " " 24.....26c
" " " " 27.....26c
Bagging " 23c
3-ply "B" in hanks.....18c
4 " "B" " 18c
3 " "A" 27c
3 " Silver Finish, in hanks....37c
Fodder or Lath.
130 strand 6½c
200 strand .....

VISES.
Phoenix.....30%
Phoenix Oval Slide,
In. 2½ 3 3½ 4½
Ea. $1 25 $1 50 $1 85 $2 75
Parker's Parallel.....18&20%
Parker's Victor.....15%
Parker's Combination.....75%
Solid Box..... ....40&5%
Adam's Mechanics'.....each 2 50
Williamson Universal.....60%

WARE.
Stove Hollow Ware.
Plain or Unground.....50%
Ground Ware.....45%
Enameled Ware.....33⅓%
Country Hollow Ware, per 100 lbs. $3.00
White Enameled Ware.
Maslin Kettles .....60&10%
Covered Ware, Tin'd and Turn'd 35-10%
Enameled.....45&10%
Glue Pots, Tinned.....25%
Enameled.....30%
Enameled.
Cherry Blossom and Chrysolite.50%

WASH BOARDS—See Boards.

WASHERS.
Standard O. G. cast iron...per ℔. 2½c
Wrought iron in bulk per ℔.:
In. ½ ¾ 1 1¼ 1½ 1¾ 1
9c 6½c 5c 4½c 4½c 4½c 3½c
Wrought steel in 5 ℔. boxes, per ℔.
In. ½ ¾ 1 1¼ 1½ 1¾ 1
10c 7c 6c 5½c 5c 5c 4½c

WASHING MACHINES—See Machines.

WEDGES.
Ax.....per doz....$6
Galling .....per ℔ 10½
Saw ..... " 8½

WEANERS.
Calf.
Fuller's, per doz.....$2 00 to $2 50
Tyler's Safety, per doz 1 85 to 2 40
Carroll's, per doz..... 3 00 to 3 75
Standard, per doz..... 3 00
Hoosier, per doz..... 3 50 to 4 00

WEIGHTS.
Hitching ....per ℔ 2½c
Sash—F.O.B. Chicago...pr ton $23 50

WHEEL BARROWS.
Common Railroad....per doz..$17 00
Heavy " .... " .. 24 00
Panama Steel Tray " .. 30 00
Klondike " " .. 28 00

WHEELS.
Corundum .....70&10&5%
Emery .....75&5%
Well In. 8 10 12 14
Per doz.....$2.40 $3.25 $4.00 $6.00

WIRE.
Barbed Painted. Galv'd.
Carloads..per 100 lbs..$2.60 $2.90
Less than car " .. 2.65 2.95
Brass.
In coils.....30%
In 1 ℔ spools, new list.....50%
Broom—Tinned.....60&10&10&10%
Cable—Same price as Barbed Wire
Copper.
In coils.....30&10%&35½%
1 ℔ spools, new list .....50&10%
Fence—Smooth.
Nos. 6 to 9, An'eal'd, pr 100 lbs. $2.20
Nos. 6 to 9, Galvl'd... " 2.60
Hair—New list 50%
Market.
Bright, full bdles.....70&5%
Bright, broken bdles 70%
Coppered, full bdles.....70%
Coppered, broken bdles.....65&10%
Tinned, full bdles.....70&5%
Tinned, broken bdles.....65&10%
Picture—In coils.....80%@80&10%
In 5 ℔. spools. .....per ℔..26c
Plain—Small lots.....$2.10
Car lots 2.05
Small spools 5c per hundred higher.

WRENCHES.
Acme Standard.....60%
Alligator No. 1.....85c net
Always Ready.....50%
Coe's Standard.....40&10&5%
Agricultural.....70&5%
Ellis Adjustable.....25%
Malleable "S".....per ℔. 06c
Malleable..... " 08c
Stillson Pipe 70%

BEMIS & CALL'S WRENCHES.
Improved Adjustable S nut.....40%
" " S pipe.....40%
Briggs Pattern nut.....40%
Combination Bright 40%
" Black.....40&5%
Steel Handle nut 50%
Merrick Pattern nut.....50%

WRINGERS.
No. 22, Guarantee....per doz.$22 5
No. 110, Guarantee.... " 22 5
No. 110, Brighton..... " 23 50
No. 110, Bicycle ..... " 31 50
No. 500, Royal ..... " 32 50
No. 350, Universal.... " 28 00
No. 300, Novelty..... " 28 00
No. 310, Keystone .... " 26 00
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Wooden Ventilator Co..... 16
Yost Mfg. Co., G. M..... 60
Youngstown Furnace & Supply Co..... 7
Zucker & Levett & Loeb..... 53

CLASSIFIED LIST.

Adding Machines

Automatic Adding Machine Co., New York, N. Y

Augers—Post Hole

Iwan Bros., Streator, Ill

Boilers—Steam

Boynton Furnace Co., Chicago, Ill

Boiler Handles

Berger Bros. Co., Philadelphia, Pa

Bolts

Columbus Bolt Wks., Columbus, O
Star Expansion Bolt Co. New York, N.Y

Boxes—Hardware

Green Co., A. H., New York

Brass and Copper

Hungerford, U. T., Brass & Copper Co. New York, N. Y

Bread Mixers

Pritchard-Strong Co., Rochester, N. Y

Cans

Stuber & Kuck. Peoria, Ill

Carpenters' Tools

Davis & Cook, Watertown, N. Y
Griffin Mfg. Co., Erie, Pa
North Bros. Mfg. Co., Philadelphia, Pa

Carriage Forgings

Columbus Bolt Works, Columbus, O

Cases—Revolving

American Bolt & Screw Case Co. Dayton, Ohio

Ceilings

Berger Mfg. Co., Canton, O
Burton, W. J. Co., Detroit, Mich
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Friedley-Voshardt Co., Chicago, Ill
Kanneberg Roofing & Ceiling Co., New York, N. Y
Keighley Met. Ceiling Co. Pittsburg, Pa
Milwaukee Corrugating Co., Milwaukee, Wis
Northrop, Coburn & Dodge Co., Philadelphia, Pa
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn
Wheeling Corrugat'g Co., Wheeling, W. Va

Cement—Plumbers

Obermayer Co., S., Cincinnati, O

Cement—Roofing

Conners, Wm. Paint Mfg. Co. Troy, N.Y

Chains

Bridgeport Chain Co., Bridgeport, Conn

Chains—Jack and Safety

Hungerford, U. T. Brass & Copper Co., New York

Chimney Tops

Iwan Bros., Streator, Ill
Powers Bros., Streator, Il

Clips—Carriage Trimmer's

U. S. Clothes Pin Co., Montpelier, Vt

Clothes Dryers

Mannen & Esterly, Cleveland, O
Martcross Co., Chicago

Clothes Pins

U. S. Clothes Pin Co., Montpelier, Vt

Coil Springs

Pullman Mfg. Co., Rochester, N.Y

Conductor Hangers

Berger Bros. Co., Philadelphia, Pa

Conductor Pipe

Berger Mfg. Co., Canton, O
Canton Mfg. Co., Canton, O
Clark, Quien & Morse, Peoria, Ill
Eller Mfg. Co., Canton, O
Friedley & Voshardt, Chicago, Ill
La Crosse Steel Roof. Co., La Crosse, Wis
Reeves Mfg. Co., Canal Dover, O
Schoedinger, F. O., Columbus, Ohio
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Copper and Brass

Hungerford, U. T., Brass & Copper Co., New York, N. Y

Corn Cribs

Denning Wire & Fence Co., Cedar Rapids, Ia

Cornices

Berger Mfg. Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Schoedinger, F. O., Columbus, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Cornice Brakes

Bertsch & Co., Cambridge City, Ind
Dreis & Krump Mfg. Co., Chicago, Ill
Niagara Machine & Tool Wks., Buffalo, N.Y

Cut Offs—Rain Water

Cooney & Geiger, Indianapolis, Ind
La Crosse Steel Roof. Co., La Crosse, Wis
Milwaukee Corrugating Co., Milwaukee, Wis

Cutlery

Weiss, L. T., Brooklyn, N.Y

Dampers

Howes, S. M., Co., Boston, Mass
Sayre Stamping Co., Sayre, Pa

Eaves Trough

Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Iwan Bros., Streator, Ill
La Crosse Steel Roof. Co., La Crosse, Wis
Milwaukee Corrugating Co., Milwaukee, Wis.
Schoedinger, F. O., Columbus, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn
Whitacre, J. R. Mfg Co., Rockford Ill
Wheeling Corrugating Co., Wheeling, W. Va

Elbows—Conductor Pipe

Canton Mfg. Co., Canton, O
Dieckmann, Ferdinand Cincinnati, O
Milwaukee Corrugating Co., Milwaukee, Wis.
Eller Mfg. Co., Canton, O
Reeves Mfg. Co., Canal Dover, O
Wheeling Corrugating Co., Wheeling, W Va

Elbows—Stove Pipe

Reeves Mfg. Co., Canal Dover, O

Electro Plating Outfits

Hanson & Van Winkle Co., Chicago, Ill
Zucker & Levett & Loeb, New York, N.Y

Elevators

Kimball Bros. Co., Council Bluffs, Ia

Enameled Ware

Lalance & Grosjean Mfg. Co., Chicago, Ill
Leffler, Thiele & Co., New York, N.Y
Star Enameling and Stamping Co., Pittsburgh, Pa

Fencing—Wire

Denning Wire & Fence Co., Cedar Rapids, Ia
Pittsburgh Steel Co., Pittsburgh, Pa

Files

Carver File Wks., Philadelphia, Pa
Disston Henry & Sons, Philadelphia Pa

Firearms

Stevens, J. Arms and Tool Co., Chicopee Falls, Mass
Marlin Firearms Co., New Haven, Conn

Firearms—Accessories

Stevens, J. Arms and Tool Co., Chicopee Falls, Mass

Forming Rolls

Bertsch & Co., Cambridge City, Ind
Niagara Mch. & Tool Wks., Buffalo, N.Y

Foundry Supplies

Obermayer, S. Co., Cincinnati, O
Stevens, F. B., Detroit, Mich

Furnaces—Gas

Blickelhaupt Skylight Works, New York
Mannen & Esterly Co., Cleveland, O

Furnaces—Hot Air

Beckwith, Estate, P. D. Dowagiac, Mich
Boynton Furn. Co., Chicago, Ill
Cox, Abram, Stove Co., Philadelphia, Pa
Galusha Stove Works, Rochester, N. Y
Green Fdy. & Furn. Wks., Des Moines, Ia
Haynes-Langenberg Mfg Co., St. Louis, Mo
Henry & Scheible Co., Cleveland,
Hess-Snyder Co., Massillon, O
Kelsey Heating Co., Syracuse, N. Y
Lennox Furnace Co., Marshalltown, Ia
Mannen & Esterly Co., Cleveland, O
March-Brownback Stove Co., Pottstown, Pa
May & Fiebeger Akron, O
Monroe Fdy. & Furn. Co., Monroe, Mich
Mueller, L. J. Furn. Co., Milwaukee, Wis
Ralt, Walter S. & Co., Chicago, Ill
Robinson Furnace Co., Chicago, Ill
Schwab, R. J. & Sons Co. Milwaukee, Wis
Stanton Heater Co., Martin's Ferry, O
Stove & Range Co. of Pittsburgh, Pittsburgh, Pa
Youngstown Furn. & Supply Co., Youngstown, O

Furnaces—Tinners'

Blickelhaupt Skylight Works, New York, N.Y
Clayton & Lambert Mfg. Co., Detroit, Mich
Turner Brass Works. Sycamore, Ill
Yost Mfg. Co., G. W., Mechanicsburg, Pa

Furnace Pipe and Fittings

Green Fdy. & Furn. Wks., Des Moines, Ia
Meyer, F. & Bro. Co., Peoria, Ill
Mueller, L. J. Furn. Co., Milwaukee, Wis
Robinson Furnace Co., Chicago, Ill

Generators—Low Voltage
Hanson & Van Winkle Co., Newark, N.J

Hand Punching Machines
American Lock Nut Co., Oregon. Ill

Hangers—Door
Safety Door Hanger Co., Ashland, O

Hangers—Eaves Trough
Schoedinger, F. O., Columbus. O

Hangers—Garment
Pullman Mfg. Co., Rochester, N.Y

Hardware Jobbers
Clark, Quien & Morse, Peoria, Ill
Paxton & Gallagher Co., Omaha, Neb

Hardware Specialties
Bemis & Call Hardware & Tool Co., Springfield, Mass
Butler Bros., Chicago, Ill
Carver File Co., Philadelphia, Pa
Enterprise Mfg. Co. of Pa., Philadelphia. Pa
Holt-Lyon Tarrytown, N. Y
Pritchard-Strong Co., Rochester, N. Y
Pullman Mfg. Co, Rochester, N. Y
Smith & Hemenway Co., New York, N. Y

Heaters—Oil
Barler, A. C. Mfg. Co., Chicago

Heating
Detroit Heating & Lighting Co., Detroit, Mich
Kelsey Heating Co Syracuse, New York, N. Y

Hinges
Griffin Mfg. Co., Erie. Pa
Lawson Mfg. Co., Chicago, Ill

Hollow Ware
Avery Stamping Co., Cleveland. O
Sperry, D. R. & Co., Batavia, Ill

Horse Nails
Standard Horse Nail Co., New Brighton, Penna

Ice Cream Freezers
North Bros. Mfg Co., Philadelphia. Pa

Kitchen Utensils
Avery Stamping Co., Cleveland. O
Holt-Lyon Co., Tarrytown, N. Y
Lalance & Grosjean Mfg. Co., Chicago, Ill
Leffler, Thiele & Co., New York City

Lanterns
Berger Mfg. Co., Canton. O

Lawn Mowers
Clipper Lawn Mower Co., Dixon. Ill

Levels
Baker-McMillen Co., Akron, O
Davis & Cook. Watertown, N. Y

Lightning Rods
Maher & Son Lightning Rod Co., Preston. Iowa
Security Lightning Rod Co., Burlington. Wis

Mail Boxes
Blick Williams Co Indianapolis. Ind
Peck-Hamre Mfg. Co., Berlin, Wis
Signal Mail Box Co Joliet. Ill

Metal—Perforated
Harrington & King Perforating Co. Chicago. Ill

Metal Polish
Hoffman, Geo. W., Indianapolis, Ind
Nickel Plate Stove Polish Co., Chicago, Ill

Metal Shingles
Burton W. J. Co., Detroit, Mich
Cortright Metal Roofing Co., Philadelphia, Penna
Nat'l Sheet Metal Roofing Co., Jersey City, N. J
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Mica
Munsell, Eugene & Co., Chicago

Miters
Whitacre, J. E. Mfg. Co., Rockford. Ill

Motors—Water
Lippincott S. S. & S. Co., New York, N.Y

Nails and Tacks—Copper
Hungerford, U. T., Brass & Copper Co., New York, N. Y

Nickel Plating Plants
Hanson & Van Winkle Co., Chicago. Ill
Zucker & Levett & Loeb, New York, N.Y

Nuts
American Lock Nut Co., Oregon, Ill
Columbus Bolt Works, Columbus. O

Paints and Paint Specialties
Buckeye Paint & Varnish Co., Toledo, O
Connors, Wm., Paint Mfg. Co., Troy, N. Y
Dixon, Jos. Crucible Co., Jersey City, N.J

Patterns—Sheet Metal
Gray, G. L., New York, N. Y

Pencils
Dixon, Jos. Crucible Co., Jersey City, N.J

Perforated Metal
Harrington & King Perforating Co., Chicago. Ill

Photograph Clips
U. S. Clothes Pin Co., Montpelier, Vt

Pistols
Stevens, J. Arms & Tool Co., Chicopee Falls, Mass

Plungers
Berger Bros. Co., Philadelphia, Pa

Polish—Metal
Hoffman, Geo. W., Indianapolis, Ind
Nickel Plate Stove Polish Co., Chicago, Ill

Polish—Stove
Nickel Plate Stove Polish Co., Chicago, Ill

Pumps
Berger Mfg. Co., Canton, O
Hess-Snyder Co., Massillon, O

Punches
American Lock Nut Co., Oregon, Ill
Bertsch & Co., Cambridge City, Ind
Niagara Mchine & Tool Works., Buffalo, N.Y

Putty—Stove
Connors, Wm. Paint Mfg. Co., Troy, N.Y

Rasps
Disston, Henry & Sons., Philadelphia, Pa
Carver File Wks., Philadelphia, Pa

Razors
Kampfe Bros., New York, N.Y
Smith & Hemenway Co., New York, N.Y.
Weiss, L. T. Brooklyn, N.Y

Registers
Ferrosteel Co., The, Cleveland, O
Henry & Scheible Co., Cleveland, O
Mueller, L. J., Furn. Co., Milwaukee, Wis
Rochester Radiator Co., Rochester, N.Y
Schwab & Sons Co., Milwaukee, Wis
Standard Register Co., Cleveland, O
Symonds Mfg. Co., E. St. Louis, Ill

Register Faces
Wooden Ventilator Co., East Palistine, O

Rifles
Marlin Firearms Co., New Haven, Conn
Stevens, J. Arms & Tool Co., Chicopee Falls, Mass

Rivets
Columbus Bolt Works, Columbus, O
Hungerford, U. T., Brass & Copper Co., New York, N. Y

Roasters
Republic Metalware Co., Chicago, Ill

Roofing—Asphalt
Stowell Mfg. Co., Jersey City, N.J

Roofing—Iron and Steel
American Sheet & Tin Plate Co. Pittsburgh, Pa
Berger Mfg. Co., Canton, O
Burton, W. J. Co., Detroit, Mich
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton O
Follansbee Bros. Co., Pittsburgh, Pa
Friedley & Voshardt. Chicago, Ill
Kanneberg Roofing & Ceiling Co., New York, N. Y
La Crosse Steel Roof. Co., La Crosse, Wis
Nat'l Sheet Metal Roof. Co., Jersey City, N. J
Reeves Mfg. Co., Canal Dover. O
Schoedinger, F. O., Columbus, O
St. Paul Roofing, Cornice & Ornamen Co., St. Paul, Minn
Sykes, Steel Roofing Co., Chicago, Ill
Wheeling Corrugating Co., Wheeling, W. Va

Roofing Cement
Connors Paint Co., The Wm., Troy, N.Y
Taylor Co., N. & G., Philadelphia, Pa

Roof Paint
Dixon, Jos. Crucible Co., Jersey City, N.J

Rules
Lufkin Rule Co., Saginaw, Mich

Sash Balances
Pullman Mfg. Co., Rochester, N.Y

Saw Sets and Saws
Disston, Henry & Sons, Philadelphia, Pa
Goodell-Pratt. Greenfield, Mass
Smith & Hemenway Co., New York, N.Y

Screens—Perforated Metal
Harrington & King Perforating Co., Chicago, Ill

Screen Door Checks
Pullman Mfg. Co., Rochester, N. Y

Screws
Columbus Bolt Works. Columbus, O

Screw Drivers
North Bros. Mfg. Co Philadelphia, Pa

Scuttle Openers
Bickelhaupt, G., Skylight Works, New York, N. Y

Seamless Tubing—Brass & Copper
Hungerford, U. T., Brass & Copper Co., New York, N. Y

Shears
Bertsch & Co., Cambridge City, Ind
Niagara Mch. & Tool Wks., Buffalo, N.Y
Weiss, H. & Co., New York, N.Y

Sheets—Black and Galvanized
Berger Mfg. Co., Canton, O
Taylor Co., N. & G., Philadelphia, Pa
Wheeling Corrugat'g Co., Wheeling, W. Va

Sheet Metal Ornaments
Gerock Bros. Mfg. Co., St. Louis, Mo

Sheet Metal Patterns
Gray, G. L., New York, N. Y

Sheets—Planished
Ward-Dickey Steel Co., Indiana Harbor, Ind

Sheets—Steel
American Sheet & Tin Plate Co., Pittsburgh, Pa
Nat'nal Ass'n of Master Sheet Metal Workers, Philadelphia, Pa
Taylor Co., N. & G., Philadelphia, Pa
Ward-Dickey Steel Co., Indiana Harbor, Ind

Shot Guns
Marlin Firearms Co., New Haven, Conn
Stevens J., Arms & Tool Co., Chicopee Falls, Mass

Shovels
Avery Stamping Co., Cleveland, O

Siding
Milwaukee Corrugating Co., Milwaukee, Wis

Sifters
Stuber & Kuck. Peoria, Il

Skylights
Burt Mfg. Co., Akron, Ohio
Eller Mfg. Co. Canton, O
Galesburg Cornice Wks., Galesburg, Ill
Schoedinger, F. O., Columbus, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Skylight Gearing
Bickelhaupt, G., Skylight Works, New York N. Y
Weiss, H. & Co., New York, N.Y

Slate Roofing
Auld & Conger Co., Cleveland, O

Solder
Taylor Co., N. & G., Philadelphia, Pa

Squares, Machinists'
Disston, Henry & Sons, Philadelphia, Pa

Stampings—Sheet Metal
Avery Stamping Co., Cleveland, O

Stoves and Ranges
Beckwith, P. D. Estate, Dowagiac, Mich
Champion Steel Range Co., Cleveland, O
Chicago Stove Works, Chicago, Ill
Comstock-Castle Stove Co., Quincy, Ill
Cox Stove Co., Abram, Abram, Pa
Culter & Proctor Stove Co., Peoria, Ill
Foster Stove Co., Ironton, O
Glazier Stove Co., Chelsea, Mich
Ringen Stove Co., St. Louis, Mo
Stove & Range Co. of Pittsburgh, Pittsburgh, Pa.
Union Stove Co., New York, N.Y
Willard, Wm. G., St. Louis, Mo

Stove Cement
Dixon, Jos. Crucible Co., Jersey City, N J

Stoves—Gas
Stove & Range Co. of Pittsburgh Pittsburgh, Pa

Stove Mats
Stuber & Kuck, Peoria, Ill

Stove Patterns
Cleveland Castings Pattern Co., Cleveland, O
Cope Pattern, Geo. W. Wks., Detroit, Mich
Quincy Pattern Co., Quincy, Ill
Vedder Pattern Works, Troy, N Y
Weller Pattern Co., Quincy, Ill

Stove Pipe
Hemp & Co., St. Louis, Mo

Stove Pipe Thimbles
Marvin Mfg. Co., Oberlin, Kans
Stuber & Kuck, Peoria, Ill

Stove Repairs
Brauer, A. G., Supply Co., St Louis Mo
Reeves, S. V., Philadelphia, Pa

Stove Trimmings
Cleveland Nickle Works, Cleveland. O

Sugar Kettles
Sperry, D. R. Co., Batavia, I

Supplies—Electrical
Manhattan Electrical Supply Co., New York and Chicago, Ill

Supplies—Polishing
Hanson & Van Winkle Co., Newark, N J

Supplies—Stove Dealers'
Brauer, A. G., Supply Co., St. Louis, Mo

Tanks
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Tapes
Lufkin Rule Co., Saginaw, Mic

Technologist
Hooper, C. N. Dubuque, Iowa

Test Tube Holders
U. S. Clothes Pin Co., Montpelier, Vt

Thermometers—Oven
Evans Stamping & Plating Co., Taunton, Mass

Tin—Perforated
Harrington & King Perforating Co., Chicago. Ill

Tin and Terne Plate
Taylor Co., N. & G., Philadelphia, Pa

Tinners' Tools
Berger Bros. Co., Philadelphia, Pa
Lufkin Rule Co., Saginaw, Mich
Niagara Machine & Tool Works, Buffalo, N. Y
Smith & Hemenway Co., New York N.Y
Taylor Co., N. & G., Philadelphia, Pa

Tinplate
Canton Art Metal Co., Canton O
Eller Mfg. Co. Canton O
Follansbee Bros. Co., Pittsburgh Pa
Merchant & Evans Co., Philadelphia Pa
Schoedinger, F. O., Columbus, O
Taylor Co., N. & G., Philadelphia, Pa
Wheeling Corrugating Co., Wheeling, W. Va

Tinware Trimmings
Berger Bros. Co., Philadelphia, Pa
Butler Bros., Chicago, Ill

Tools, Etc.
Bemis & Call Hardware & Tool Co., Springfield, Mass
North Bros. Mfg. Co., Philadelphia, Pa

Tools—See Carpenters Tools

Tools—Linemen's
Smith & Hemenway, New York, N.Y

Trowels
Avery Stamping Co., Cleveland, O
Disston, H. & Sons, Philadelphia, Pa
Griffin Mfg. Co., Erie, Pa

Tubing—Brass and Copper
Hungerford, U. T., Brass & Copper Co., New York, N. Y

Ventilators
Burt Mfg. Co., Akron, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Friedley & Voshardt, Chicago Ill
Globe Ventilator Co., Troy, N Y
Merchant & Evans Co., Philadelphia, Pa
Powers Bros. Streator, Ill
Pullman Mfg. Co., Rochester, N. Y
Schoedinger, F. O., Columbus, O

Wagons
Sycamore Wagon Wks., Sycamore, Ill

Washers
Columbus Bolt Works., Columbus, O

Washing Machines
Blackstone Mfg. Co., Jamestown, N. Y
Brammer, H. F., Mfg. Co., Davenport, Ia
Easy Washing Machine Co., St. Mary's, Ohio
White Lily Mfg. Co., Davenport, Ia and Toledo, O

Wire Goods
Denning Wire & Fence Co., Cedar Rapids.
Pittsburgh Steel Co., Pittsburgh, Pa

Wants and Sales

For Yearly subscribers THE AMERICAN ARTISAN will insert under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

BUSINESS CHANCES.

PATENTS

HUBERT E. PECK, 623 F. St., N. W. Washington, D. C. Consulting Expert in Patent Causes. U. S. and Foreign Patents. Send for leaflet on "Rejected Patent Application."

For Sale—Hardware store, doing cash business; good town; best farms in Ohio; nice room. Rent low. Clean stock about $4,500. Established 1875. Money maker. Best proposition to get paying cash business. Will retire. Investigate. Address E-26, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 10-3t

For Sale—U. S. patent invention; is an attachment for pans and cooking utensils whereby they can be regulated as desired and thus prevented from burning. Address Earnest Hope, R. F. D. 1, Ferndale, Washington. 10-3t

For Sale—Nice clean stock of hardware and tin shop, doing a nice business in county seat in Indiana. About $10,000; can be reduced. Address E-29, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago.

For Sale—Clean hardware stock, $5,000. Brick room. Warren shelving. Furnace. Town 1,500; only two stores. No trades. Address Box L, Correctionville, Iowa. 9-3t

For Sale—Good hardware business in thriving Idaho town. Best reasons for selling. Require from $1,000 to $3,000. Address E 18, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 9-3t

For Sale—All or a half interest in one of the best located hardware stores in Michigan. Object to increase capital. Address E 21, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago.

For Sale—A clean stock of hardware in a good live farming town of 1,200 people in southern Minnesota. Doing a good business. Stock will invoice $4,000. Best reasons for selling. Here is a chance for some one to step into a good established business. Address E 16, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 9-3t

For Sale—One of the best tin and sheet metal shops right in heart of Detroit, Michigan. Located in same place for 14 years. Lease of building to run for 3 to 5 years more. This is a splendid chance for one or two tinners. Orders always on book and only small capital required. Reason for selling, wish to retire from active business. Address B. Randolph, 25 Myrtle St., Detroit, Michigan. 9-3t

For Sale—A good hardware, plumbing and heating business in nice town of 1,600, in central Illinois. Best farming country. Only one other hardware store. Stock will invoice about $5,000. Steady work for 3 or 4 men. Owner wishes to retire. Address E 17, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 9-3t

For Sale or Exchange—A clean stock of hardware, stoves, cutlery, etc., invoicing between $7,000 and $8,000 in one of the largest cities in Wisconsin. Location is a very desirable one and rent reasonable. Will sell or exchange for a similar stock in a smaller city. Good reasons for selling. Write for further information. Address E8, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago.

For Sale—A first-class stove and tin store with a good tin shop in connection. Well equipped with tools. Old reliable business stand. Selling on account of death of owner. Address, Mrs. M. L. Boyer, West Liberty, Ohio, Box 81. 8-ufn

For Sale—Hardware business. Excellent north side location. Very prosperous. Thoroughly established. Worthy of immediate investigation. Address, Fisher & Wesemann, 130 Dearborn St., Chicago. 8-3t

To Exchange—120 acre farm. Fine building with personal property for stock of hardware. Address H. M. Beimler, 759 12th St., Grand Rapids, Wis. 8-3t

For Sale—A rare chance to buy an up-to-date hardware store. Clean stock. Paying business. Must sell at once on account of poor health. Good town and fine farming country. Honorable competition. Price not demoralized. Requires about $7,000 for stock with building and lot. All up-to-date and best location in town. Part time if wanted. No trade considered. Stock about $5,000. Building and lot 24x140. Fine rooms on second floor and a bargain at $2,000. Write or call on J. W. Leighton, Livermore, Iowa. 1-ufn

For Sale—An up-to-date stock of hardware, tinning, heating and plumbing business. Will invoice about $4,000.00. In a good town of 1,200 in Eastern Iowa. Employ three men the year round. A good money-maker and will bear the closest investigation; a snap for the right party. Best of reasons for selling. For cash only. Address Lock Box 416, Williamsburg, Iowa.

TINNERS' TOOLS.

For Sale—8 foot Keene cornice brake, only used one year. Guaranteed to be as good as when it left the factory. Enclose stamp for reply. Address Charles Skidd, Kenosha, Wis. 10-3t

For Sale—Set of tinners' tools, stakes and some extra machines. Address Adolph Schied, 713 E. 3d St., Mishawaka, Indiana. 10-3t

Wanted—To buy in good condition, one 6 inch Stows beading machine. One 21 inch tin folding machine. Address F. J. Drilling, Larrabee, Iowa. 8-3t

For Sale—Part of a set of tinners' machines and tools at a bargain. Address, M. V. Brickey, Rankin, Illinois. 5-ufn.

HELP WANTED.

Wanted—A good all around tinner and furnace man in northern Dakota. Steady work at $3.00 per day to a good man. No other need apply. Send reference with application. Address E-27, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 10-3t

Wanted—A first-class all around tinner and furnace man. Steady work all year around and good wages. Address E-25, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 10-3t

Wanted—A young man to finish learning tinners' trade. A chance at plumbing and heating. Steady position in a country town in Illinois. Address E-24, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 10-2t

Wanted—A good all around tinner who can do plumbing and furnace work. Steady position in a country town in Illinois. Wages $3.00 per day. Address E-23, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 10-2t

Wanted—At once, a good tinner, one who is posted on furnace and general job work. Permanent position for right man. Apply at once to Edson Smith, Elmwood, Illinois. 10-3t

Wanted—A good tinner, one good on hot air furnace, roofing, spouting, pump and iron pipe work; $15.00 per week. Address A. J. Ross, Cambridge, Illinois. 10-3t

Tinner Wanted—Will pay $4.00 per day of 8 hours for fast tinner and furnace man. Five miles from St. Louis. Address H. H. Bischoff Hardware Company, Granite City, Illinois.

Wanted—At once, first-class cornice maker, slate and tar roofer, 40 cents per hour; steady work. No labor trouble. Address E-30, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 10-2t

Wanted—A good tinner and furnace man with some knowledge of plumbing in good town in northern Iowa; steady job and good place for the right man. Address E-31, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago.

Wanted—A tinner who understands furnace work, roofing and general repair work. Good wages to competent man. Address Anderson & Warne, Elburn, Illinois. 10-3t

Wanted—Retail stove salesman with six or more years' experience in city from ten to thirty thousand inhabitants. Young energetic man. Give references and full particulars when you write. Address W. A. Guenther & Sons, Owensboro, Kentucky. 10-3t

Wanted—Two hardware salesmen to call on city trade. Address Trout Hardware Co., Chicago, Ill. 9-ufn

Wanted—A good, sober and industrious tinner. One with a fair knowledge of the tinner's trade will do, provided he can do outside work, such as roofing, spouting, etc., and inside general repair work. A good chance to finish his trade. He will also have to do some clerking. One who speaks German preferred but can get along without it. State age, wages and references in first letter. Address, A. E. Glines, Reinbeck, Iowa. 9-3t

Wanted—At once, a good tinner with some knowledge of plumbing work, the year round. Will give a man a chance to start for himself. Also a man on tin work and good machinist. Address Chas. Weydert, Bayou Sara, Louisiana. 9-3t

Wanted—A first-class tinner to take full charge of shop as foreman. We want a man of experience, who thoroughly understands furnace and general job work and can lay out and estimate same. Married man who has had experience as foreman preferred. Steady position at good wages to right man. State age and experience. Address, E 20, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 9-3t

Wanted—At once, experienced hardware clerk. Good wages, permanent position. Send reference with application. Address Phil. Neufeld & Co., Green Bay, Station A, Wisconsin. 7-ufn

SITUATIONS WANTED.

Wanted—Steady position in all around tin shop; 19 years' experience; 35 years old; married; first-class references. Prefer northwestern territory. Address E-28, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 10-2t

Wanted—Position with hardware or stove company. Reference last employe. Am married, 30 years old, and want a steady position. Retail and road experience. Prefer western territory. Address E 22, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 9-3t

Position Wanted—Young man with twelve years' hardware experience, representing one of the largest jobbers in the country, covering eastern territory, desires position with manufacturer commencing January 1st. High class references. Address E 19, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 9-4t

Position Wanted—First-class all around tinner and sheet metal worker desires position with good firm where ability and strict attention to business will be an item; 26 years' experience. Am an A1 inside and outside man. Temperate and capable of taking charge of shop. Wages $3.00 per day. Outside city. Address Frank W. Z. Roberts, 27 Stevenson St., Freeport, Illinois. 5ufn

SPECIAL NOTICES

WANTED

Salesman with established trade in Northern Illinois and Indiana to sell on commission a Trade Mark line of Stoves and Ranges. A good chance for the right party.—Address "Indiana" care of THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago.

WANTED

Good all-around tinner; prefer one who understands heating and is able to figure work; must be sober and a hustler and able to invest $500.00 up. We have a patented sheet metal specialty business and wish to branch into general jobbing. Our acquaintance among builders and real estate people will secure us the work. Here is an exceptional opportunity for a hustler to get into a fine business. Address Tinner, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 9 1-t

This Foundry

is noted for its good work and its good ventilation. It belongs to the Norberg Manufacturing Co., Milwaukee, Wis., who equipped it with the very best and most modern features for the production of the highest grade foundry work. Consequently forty-eight 30 and 48 inch

Burt Ventilators

with sliding sleeve dampers were selected and are now being installed, as shown in the illustration. The owners wanted the best ventilation and they got it.

Burt Ventilators are not only strictly high grade in every respect, but are made with improvements and features which no other ventilators possess. Patent sliding sleeve dampers, easily adjusted, storm and dust proof, open or shut, and collect no dust. Made with glass tops if desired to act as sky lights, and by use of a damper ventilator can be closed and yet light is not shut off. Can be arranged with fusible link connection so that damper will close automatically in case of fire.

Send for our new 80-page catalogue giving fine illustrations of mills, shops, foundries and residences where Burt Ventilators are in successful use.

The Burt Mfg. Co.,

650 Main Street Akron, Ohio.

Largest Manufacturers of Oil Filters and Exhaust Heads in the World.

Notice Sliding Sleeve Damper. Patented.

SPECIAL NOTICES.

TRAVELING SALESMAN for North Dakota and western Minnesota, also one for northern Wisconsin. Commission basis, with privilege of selling another line. Must be familiar with Tin Ware, Enameled Ware and Sheet Metals. First class references required. The Republic Metalware Co., Successors to C. Sidney Shepard & Co., Chicago, Ill.

WANTED

Young married man capable of taking full charge of builders' hardware department. Give references, state experience and salary expected in first letter. Address B 81, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 9-2t.

WANTED

TINNERS AND CORNICE MAKERS To write for particulars and free sample blue print explaining our method of cutting patterns. Price and terms are within the reach of all.

New Plates. New Instructions. New Methods. The E. R. PROBERT SCHOOL, Cincinnati, O.

WANTED--Superintendent

To take charge of our factory. A man with ability, energy and push; a producer. Must have general knowledge of tool and die work. We manufacture automobile parts in sheet metal and castings, Radiators, Hoods, Tanks, Mufflers, Fenders, etc. Permanent position for the right man. Write fully, giving experience, or call on THE KINSEY MFG. CO. Dayton, Ohio.

WANTED

Three good tinners; steady job the year round to the right men. Must be capable of taking charge of shop and doing furnace work. Address C. A. PECK HARDWARE CO., Berlin, Wis. 10-ufn.

WANTED

Skilled metal workers for shop and road work. Men with experience in Blow Pipe work preferred. Address, THE ALLINGTON & CURTIS MFG. COMPANY, Saginaw, Mich. 10-4t

FOR SALE

FINE STOCK OF HARDWARE

and mechanics' tools. Doing good business, but must sell on account of poor health. Invoices about $15,000, but will reduce to $5,000. Moline is the best tool and hardware town in Illinois. Population 15,000. Exceptionally good chance to do business; good terms. Address, JOHN HEMMINGSON, Moline, Ill. 10-4t

WANTED

Four first-class tinners; furnace men preferred; good wages for sober men. Apply Auburn Park Metal Works, 540 W. 79th St. Chicago. 5-ufn

WANTED

An experienced hardware clerk, acquainted with general hardware, mill and lumbermen's supplies, to put in portion of his time on the road. A steady position is offered to one who can fill the requirements in a jobbing and retail store in Michigan. Address B 80, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago.

WANTED

Salesman with an established trade in Missouri to sell on commission a middle priced, trade-mark line of stoves and ranges, with the privilege of selling one other non-competing line. Address, giving references, D. K. 2, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 9-2t

WANTED

Two first-class traveling men by a manufacturer of a middle-priced, trade-mark line of stoves and ranges. Must come well recommended and have the ability to earn a good salary. Address, giving references, D. K. 2, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 9-2t.

Special Notice

HAVE HAD CONSIDERABLE experience calling upon stove manufacturers and hardware jobbers. Can handle specialty to good advantage. Am desirous of making a change. Address "P. D. Q." care of THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago. 8-ufn

Graphite as a Lubricant — Tenth Edition

The very latest and freshest information, both scientific and practical, on the modern practice of graphite lubrication. Send for free copy 18-C.

Joseph Dixon Crucible Co. Jersey City, N. J.

SPECIAL NOTICES.

WANTED

I can pay the highest market prices F O. B. your city, for all kinds of old metals, such as copper, brass, zinc, lead, babbitt, skinnings, etc. Drop a line and I will be glad to name my best prices.
H. KANDER, Bowling Green, Ohio
8-u.f.r

FOR SALE

Have completely equipped metal working factory, manufacturing patent specialties, with dies, tools, presses, gas engine, etc., that can be bought right and can be moved if desired. This business will make a fortune for the right man; is not seasonable but can be run all the year. $5,000 or less takes it. HOWARD, 107 Bethune East, Detroit, Mich. 5-4t

WANTED

Salesmen for Michigan. One who is acquainted with the house-furnishing trade in that State and who has had experience in Sheet Metal goods line. Address, REPUBLIC METALWARE CO., Buffalo, N. Y. 5.1t

WANTED

Experienced and high class foreman of furnace shop to take an interest in the business and manage a retail furnace business in large northern city. No capital required but reply must come quick. Address Furnace Foreman, care AMERICAN ARSISAN, 69 Dearborn Stt., Chicago. 5-2t

To Exchange

Good improved farm in excellent location for stock of hardware or hardware and implements. Give full description of stock, and price of any real estate that would be included, in your reply. Address "Nilco," THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 5-4t

Special Notice

We want to get in touch with a good jobber or warehouse to distribute our stoves throughout the Northwest. Address with full details, "B-60" care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 16-ufn

WANTED.

Six first-class tinners. A steady position the year around for the right men. A good shop and good tools. Write at once to C. A. Peck Hardware Company, Berlin, Wisc.
8-u. f. n.

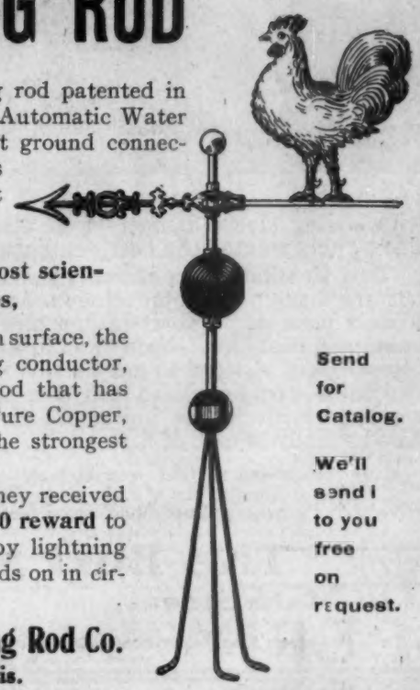
Foreman Wanted

To take charge of factory making tinware specialty; one accustomed to dies and presses. Good salary and desirable position for capable man. State experience. Address "Foreman," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 16-ufn

A PRACTICAL TINNER

will teach sheet metal pattern cutting by mail. Course is practical and complete, and the cost small. Learn cutting and double your wages. Write TINNER, 72 Celeron Street, Detroit, Mich. 10-1t

THE SECURITY COPPER TUBE LIGHTNING ROD



It is the only lightning rod patented in the United States with Automatic Water Supply, insuring a perfect ground connection at all times which is the most important part of any rod.

Constructed on the most scientific principles,

has a large, round, smooth surface, the best form for a lightning conductor, and is the only Copper Rod that has a patented Coupling of Pure Copper, which makes the oint the strongest part of the rod.

We will refund all money received for the rods and **pay $500 reward** to find a building burned by lightning with our copper tube rods on in circuit form.

Send for Catalog.

We'll send i to you free on request.

The Security Lightning Rod Co.
Burlington, Wis.

MAHER & SON LIGHTNING ROD CO. is the only firm that makes a 32 wire cable. Arrow Vanes made of Pure Cast Aluminum; Horse, Cow and Rooster Vanes made of Pure Zinc instead of tin and 34 ins. long, pure copper bayonet points. Giving $500.00 guarantee.

We have the finest static machine now, something new and given to our agents FREE. Write to-day for Agency and territory. Our prices are right.

MAHER & SON LIGHTNING ROD CO., :: PRESTON, IA.

GRAY'S SCHOOL

OF SHEET METAL PATTERN DRAFTING

Do You wish to be a Cutter? If so, Here is Your Opportunity

This school is offering a **three months' trial** for $5.00 to anyone who is interested in **Sheet Metal Pattern Drafting.**

The trial will convince you that this course is just what you want. **Pattern Drafting** from start to finish.

Cut out this ad. and send it to the address below, with $5.00 enclosed, and the three months' drawings and instruction sheets will be sent you by return mail.

Address:

G. L. GRAY
1028 Jackson Ave. New York City

BEST GENERAL UTILITY

Patented Proposition in the United States

HEATING ATTACHMENT that will burn HARD COKE and ANTHRACITE in an OPEN GRATE.
17 Years Protection.
Manufacture CHEAP.
Will sell Illinois rights for $25,000 CASH.
Stove or Grate Manufacturer can make $100,000 in a year.
Details Supplied.

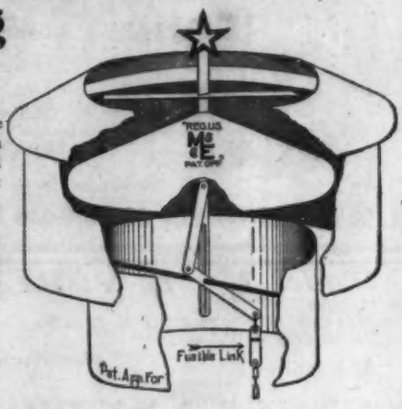
COLOMB-DELPH HEATER COMPANY,
COLOMB P. O., LOUISIANA

THOMPSON'S RAPID ELBOW PATTERNS

Are Reliable. Printed on Cloth. Will last for years.

H. F. THOMPSON
509 East Main St. Decorah, Iowa.

The Fire-Retarding "Star" Ventilator



The roof of this Ventilator is movable vertically, and is held in its highest open position by a lever movement, controlled by a fusible link. In case of fire the link parts, and the top drops down by gravity, closing the opening.

The top is also a damper itself, as by regulating the chain length the opening is partially or wholly closable at any time, and still retaining its automatic closing feature in case of fire.

Therefore we offer the

COMBINATION: 1st. The Automatic Fire-Retarding "Star" Ventilator. 2d. A Controllable Damper—ALL IN ONE.

Hundreds of these Ventilators now in use. They are absolutely storm-proof, and our Ventilators have a proven speed of air exhaust in excess of any other made.

Can be supplied with glass top. Simpler and with fewest parts made. Also lightest in total weight, without sacrifice of proper gauge.

"Reg. in U. S. M&E Pat. Off."

Merchant & Evans Company

Successors to Merchant & Co., Inc.

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Two Reasons Why The Steel Brakes Are Better

Others Will Follow

1. By our patented construction we have succeeded in getting the greatest amount of strength with the minimum weight. They work much faster and easier, and do fully one-fourth more of the average work than any other brake.

2. They are made of Bessemer Steel, and all the working parts where strength is required are made of non-breakable steel castings.

You will be surprised to find out how cheap you can buy this up-to-date machine.

WRITE FOR CATALOGUE

Dreis & Krump Mfg. Co.

Halsted and 32nd Sts.

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SPERRY'S CALDRONS

Twelve sizes always in stock.

Full measure, guaranteed perfect original patterns, with metal distributed where it is needed. Many Caldrons are made from our casting as patterns. They are inferior to originals, as they have light bottoms and heavy sides and hold less.

D. R. SPERRY & CO. HOLLOW-WARE FOUNDERS **Batavia, Ill.**

THE KEES

Trade—"TWELVE IN ONE"—Mark

Adjustable Corn Husker

KEES No. 10

Twelve adjustments. Each makes a practical tool. Palm plate of light steel. Two steel hooks with each husker. Only the best grade of heavy Russett Oil Grain Leather used. Sells readily. Price is reasonable.

KEES No. 2

The Kees No. 2 is provided with a steel shield to protect the leather—made of a lighter gauge of steel than the hook plate and can be easily bent to fit hand. Adjustable to fit any size hand. The best selling husker made.

Ask your Jobber or write us.

F. D. Kees Mfg. Co.

Beatrice, Nebraska

HOLT'S Improved DOVER Egg Beater & Cream Whip

Guaranteed to Beat EGGS to Perfection in 20 Seconds

The Flared Dasher Does It.

WASH SOON AS USED BY TURNING IN WATER.

The above on a Tag is wired to every Egg Beater made by us.

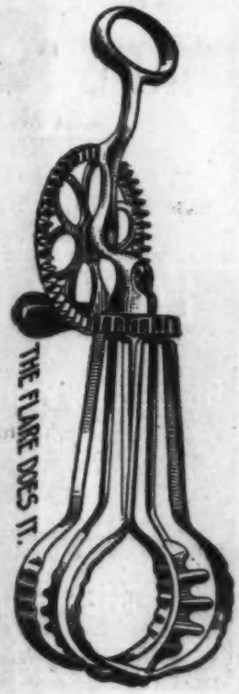
The Holt No. A Egg Beaters are much larger and heavier every way than any 10 cent Dover made.

Retail Price 15 Cents, worth 25 Cents.

The Dashers are wider, thicker and flared ¼ inch. Made in 10, 15, 20 and 25 cent size. 5 years on the market.

Sold by Jobbers. Ask for Price List Circulars.

HOLT-LYON CO., Tarrytown, N.Y.



W. W. Anderson, Sadorus, Ill., writes: "The tools I advertised are now sold, but I am still receiving inquiries about them. An ad. in THE AMERICAN ARTISAN does the business every time."

6-7

PATTERNS

For Stoves and Heaters

The Cleveland Castings Pattern Co.

CLEVELAND, OHIO

PATTERNS

For Stoves and Heaters

First-Class in Wood and Iron

Vedder Pattern Works, Troy, N. Y.

Established 1855

The GEO. W. COPE STOVE PATTERN WORKS Cor. Brush & Woodbridge Streets DETROIT, MICHIGAN

WELLER PATTERN CO.

DESIGNS and ESTIMATES FURNISHED FOR ALL KINDS OF STOVE PATTERNS

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QUINCY PATTERN CO

IRON & WOOD STOVE PATTERNS

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EVERYTHING YOU NEED IN YOUR FOUNDRY

We are Headquarters for

Foundry Facings, Plumbago, Graphite, Putty and Supplies of Every Description. In fact—

Everything You Need

in your foundry.

Get Catalog No. 40-A NOW.

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THE S. OBERMAYER CO.

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THAT

"BRAUER'S"

is the best place to buy Stove Dealers' Supplies, Castings and Stove Repairs?

Prices Are Lowest. Prompt Shipment.

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S. V. REEVES

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Manufacturer

TRADE V MARK

The LEIBRANDT & McDOWELL STOVE CO.'S STOVES and REPAIRS

CLEVELAND NICKEL WORKS, CLEVELAND, OHIO

MANUFACTURERS OF

"SUPERIOR" Improved Exhaust Tumbling Mills, Dust Arresters, Hard Iron Stars, Wrought Iron Chaplets, Plain and Tinned, Stove Rods, Furnace Rods, Chair Rods, Stove Scrapers and **all kinds of NICKEL PLATED STOVE TRIMMINGS.** Send for catalogue.

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It is your letter about Foundry Facings, Supplies, Polishers' and Platers' Compositions and Supplies which I manufacture that I am missing.

WRITE TO ME.

FREDERIC B. STEVENS, Detroit, Mich.

THE RIGHT KIND

of Oven Thermometer is

THE "Acme"

THE "Acme"

MADE BY EVANS STAMPING AND PLATING CO. TAUNTON, MASS.

Western Agent, C. H. MATTHEWS, Detroit, Mich.

LOW VOLTAGE GENERATORS

For Electroplating.

Rheostats, Voltmeters and Electrical Instruments.

Complete Outfits for Electro-Galvanizing

Bolts, Nuts, Screws, Locks, Staples, Chains and Small Hardware

Complete Nickel-Plating Plants Furnished

Polishing Supplies of All Kinds

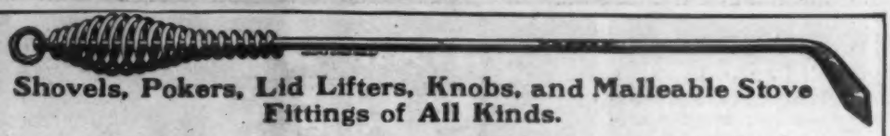
THE HANSON & VAN WINKLE CO.

(ESTABLISHED 1820)

219-221 Market Street, Newark, N. J., U. S. A.

Branch: Chicago, Ill., U. S. A.

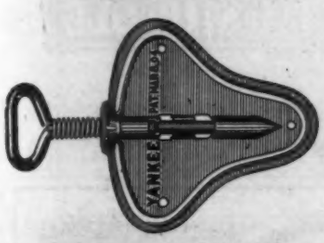
Alaska STOVE TRIMMINGS



Shovels, Pokers, Lid Lifters, Knobs, and Malleable Stove Fittings of All Kinds.

Troy Nickel Works, Albany, N. Y.

YANKEE DAMPERS and CLIP (All Steel)



SMOKE PIPE SIZES
3 inch to 8 inch

HOT AIR PIPE SIZES
6 inch to 15 inch

Easiest to Get In or Out

Best & Cheapest Damper Made

GET OUR PRICES

The S. M. Howes Co.

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SAMPLE FREE

U.S. INFALLIBLE METAL POLISH

Highest Award:—Chicago World's Fair, 1893; Louisiana Purchase Exposition, St. Louis, Mo., 1904.

IN PASTE, LIQUID OR POWDER

FOR ALL KINDS OF METALS

Best, Cheapest, Goes Farthest. Never dries up or shrinks. Money makers for everybody. Sold by the jobbing trade. Samples free by mail. Address

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508 Montgomery Ave., SAN FRANCISCO, CAL.
Established 12 Years.

NONE BEATS THE

Uncle Sam Damper

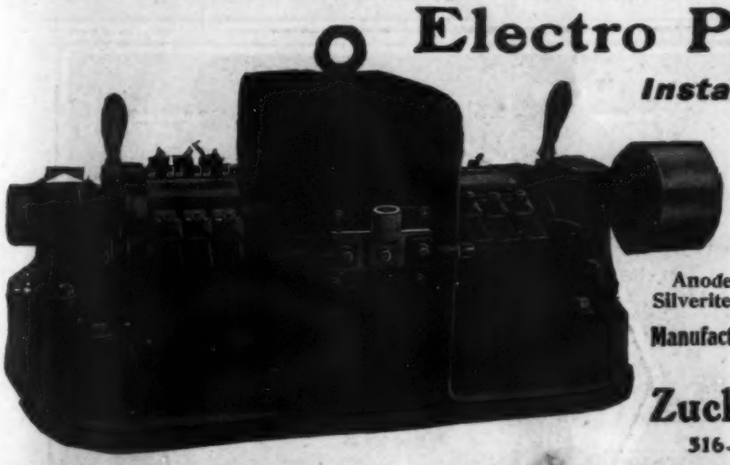
It is light, easily adjustable and enduring. The plate is stamped from best nickeled steel and is corrugated to prevent warping The stem consists of forged steel sharply pointed, notched to engage edge of plate, and is held absolutely in place.

Nothing better on the market
Send for free sample

SAYRE STAMPING CO.
SAYRE, PA.

Electro Plating Plants

Installed Complete



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Low Voltage Generators and **Direct Connected Sets** from 50-10 000 ampere capacity.

The **Rotoplater** "patented" polishes and plates at one operation in all solutions on small work.

Anodes of all metals; also **Patent Corrugated** and **Silverite Nickel Anodes,** patented.

Manufacturers of all Supplies for Polishing and Plating.

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Plecker's *Corrugated* Expanding *Conductors*

Have no Cross Seams. Made of Galvanized Iron in ten-foot lengths.

Will not burst when full of ice.

CLARK, QUIEN & MORSE, PEORIA, ILL.

Our stock of
SHEET COPPER
is larger and more complete in variety of sizes and kinds than that of any manufacturer in the country, comprising an assortment of
OVER 150 SIZES
and aggregating over
300,000 POUNDS

STAR BRAND
SHEET COPPER
U. T. HUNGERFORD BRASS & COPPER COMPANY
497-505 PEARL ST. NEW YORK 37-43 PARK ST.

Our stock includes
SOFT COPPER
Cold rolled, levelled cornice copper
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All stock sizes of above, either TINNED OR PLAIN, on hand in New York ready for immediate shipment

STOCK SHEET SHOWING FULL ASSORTMENT ON HAND. SENT ON REQUEST.

WALTERS'
Shingles that last
Made from Galvanized Tin and Painted Tin.
STORM, RUST AND FIRE PROOF
Do you want to increase your business? This is YOUR OPPORTUNITY. Write for catalogue, samples and prices.
National Sheet Metal Roofing Co.
JERSEY CITY, N. J.

THE BEST ROOFING FOR ANY BUILDING, IS
THE CORTRIGHT METAL SHINGLE
This is certainly the case from the tinners' standpoint, for they're the best money making proposition he handles. Thousands of them have snug bank accounts as the result of sending their name to us and expressing a willingness to lay them.
CORTRIGHT METAL ROOFING CO., PHILADELPHIA AND CHICAGO

EAGLE BRAND ROOFING
SECURE
PROTECTION AND LONG SERVICE BY USING OUR
ASPHALT ROOFING
SAVES REPAIRS---
SAVES RECOATING
SAVES RENEWING
Send for Samples or Pamphlet
STOWELL MFG. CO.
JERSEY CITY, N. J.

CORNICE
SKYLIGHTS Finials Ventilators
TIN METAL CEILINGS EAVES
PLATE Conductor Pipe ROUGH
Roofing & Siding
GET OUR PRICES
THE CANTON MFG. CO.
CANTON OHIO
MAKERS OF HIGH GRADE SHEET METAL GOODS

Gerock Bros. Mfg. Co.
Sheet Metal Ornaments and Statuary
Detail Work a Specialty
Ask for Catalogue
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YOUR PROFITS on a job of metal ceiling depend upon the time occupied in the erection. If the plates do not fit, and the alignment is bad, it means your profit will be small and you will present an unsatisfactory job to your customer. Better be on the safe side and buy "Canton" Metal Ceilings, the profit sharing kind
Our book "Art in Metal Ceilings" is yours. Write for it.
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PERFORATED METALS
OF EVERY DESCRIPTION AND FOR ALL PURPOSES
FOR SCREENS OF ALL KINDS

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New York Office: 114 Liberty Street.

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Call in your stenographer and simply say, "Eller Manufacturing Company, Canton, Ohio. Send for catalogue." You will be more than repaid. We take such an interest—are glad to serve you, and for years everybody knows **"Eller"** has stood for the **highest in quality.**

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Big Money For Dealers

in Metal Ceilings, Side Walls and Tiling for use in Stores, Factories, Homes and every kind of a building, old or new—if you sell NORTHROP Steel Ceilings and Walls.

Northrop Steel Ceilings and Walls

are not only the *finest made* at any price, but they are also the *best known* line because *the most extensively advertised* line.

Our big Magazine Advertising Campaign reaches *over three mil ion readers* every month—and inquiries are always referred to the nearest Dealer.

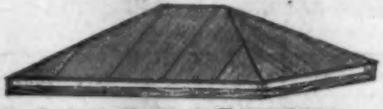
We also help each Dealer *personally and individually*, as no other Manufacturer does.

Write for Catalog and Price List and our Booklet "How We Help the Dealer," which explains in detail, the big profit in selling this line of goods either as a special Department or as a side line, and *how we help* the Dealer sell.

Northrop, Coburn & Dodge Co.
31 Cherry Street, N. Y.

KNOCKED DOWN SKYLIGHTS

CRATED READY FOR SHIPMENT NO SOLDERING NO PUTTY NO LEAKS



Can be shipped anywhere safely at a low freight rate. Can be set up by anyone. Write for Catalogue.

GALESBURG CORNICE WORKS

14 East Ferris Street GALESBURG, ILLINOIS

CEILINGS

If you fully realized the immense advantage of having a metal ceiling air-tight and dust-proof, you, too, would agree with us in saying that Lock-Joint is the correct construction.

Lock-Joint costs just a little more, but—

You may save money in the first cost by getting Keighley's prices on the Lap-Joint metal ceiling also.

Would you like catalogue "D"?

S. Keighley Metal Ceiling & Mfg. Co.
PITTSBURGH, PA.

New York, N. Y. Washington, D. C.
Baltimore, Md. Boston, Mass.

KEIGHLEY

CEILINGS AND SIDE WALLS

Our designs are very artistic, composed of the latest patterns. Easily and quickly applied.

Write for prices and illustrated catalogue, or send us measurements for estimate.

THE W. J. BURTON CO.
DETROIT, MICH.

ROOFING SLATE

All Grades Manufactured and Sold by

THE AULD & CONGER CO.
CLEVELAND, O.

Roofers' Supplies, Tools, Lightning Slate Dresser

WE MINE OUR OWN SLATE

YALE
Russia finish, pat. lock
STOVE PIPE

It is made of a very high grade of uniform color Blue Polished Steel, and is coated to prevent rusting. Made in all sizes.

Packed twenty-five and fifty joints to crate. For sale by the jobbing Hardware Trade throughout the United States.

MFD. BY
HEMP & CO.
2nd & Chouteau Ave.
ST. LOUIS

In the event your jobber does not handle this pipe send your inquiries to us.

Cornices and Skylights

Remember F. O. SCHOEDINGER, when in need of Cornices or Skylights. He will save you money—give you better work—and insure prompt delivery. 8 styles of skylight and 41 cornice designs illustrated in our big catalog. Have you a copy?

Buy of the Big Manufacturer

F. O. SCHOEDINGER, Columbus, Ohio

DEPT. 2 **146—NORTH THIRD STREET—148**

La Crosse Steel Roofing and Corrugating Co.

LA CROSSE, WISCONSIN

MANUFACTURERS OF

EAVES TROUGH
CONDUCTOR PIPE
CUT OFFS
MITRES, ENDS AND DROPS
ROOFINGS AND SIDINGS
STEEL CEILINGS
CORNICES
SKYLIGHTS

Quick Shipments Our Specialty *Send for Catalog*

Perfection In Metal Ceilings

THE GOODS MANUFACTURED BY

FRIEDLEY-VOSHARDT CO.

ARE IN A CLASS BY THEMSELVES
WRITE TO-DAY FOR CATALOGUE AND PRICES

194-204 Mather Street - Chicago, Ill.

JUST BLOW ALL YOU LIKE

Still the fact remains.

That **KANNEBERG'S ART METAL CEILINGS,** of exclusive design is respected above all others for its high standard of quality, workmanship and large variety of designs from which to choose. Perfect fitting plates, dust proof joints. We invite correspondence from parties contemplating building or remodeling. Plans and estimates cheerfully furnished. Our customers are always satisfied. Give us a chance to figure with you on your next contract.

Our **METAL SHINGLES** are giving universal satisfaction, and make a very desirable ornamental roof. Get our prices.

We also manufacture all styles Roofing, Cornices, Skylights, Finials, Ventilators, Eaves trough, Conductor pipe, etc., etc.

Ceiling Catalogue No. 4-D. Roofing Catalogue No. 4-G.

KANNEBERG ROOFING & CEILING CO.

Manufacturers **CANTON, OHIO, U. S. A.**

CONDUCTOR ELBOWS

(PATENTED)

Trade F. Dieckmann Mark

Cost Least On the Job.

One Piece.
1225 Varieties.

SAMPLES CATALOGUES

HEAVIEST GAUGE ELBOW ON MARKET

FERDINAND DIECKMANN

Station B, CINCINNATI, OHIO

FREIGHT CHARGES are sometimes heavy charges. *We can*

SAVE YOU MONEY

We are large manufacturers—small profits—

MANY SALES

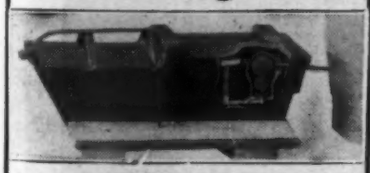
SYKES STEEL ROOFING CO.

Chicago, Ill., and Niles, Ohio

Mfrs. Steel Roofing, Corrugated Iron, Etc.

THE HAWKEYE

Automatic Hog Waterer



Warranted For Five Years.
Holds Five Gallons.
Nothing to Get Out of Order.
Four Hogs Can Drink at One Time.

We want one Hardware Merchant in each town as exclusive agent.

Paxton & Gallagher Co.

OMAHA, NEB.

Sole Agents for Nebraska, Western Iowa and Northern Kansas.

"Neverbreak" Conductor Hooks

(PATENT APPLIED FOR)

ELBOWS

Kuehn's 20th Century Cut-Offs

(PATENT APPLIED FOR) TIN PLATE

Eaves Trough, Conductor Pipe, Roofing, Siding, Etc.

"Invisible Joint"

METAL CEILINGS

Perfect in fit, quality and ornamental detail.

Send for Catalog. Estimates promptly submitted.

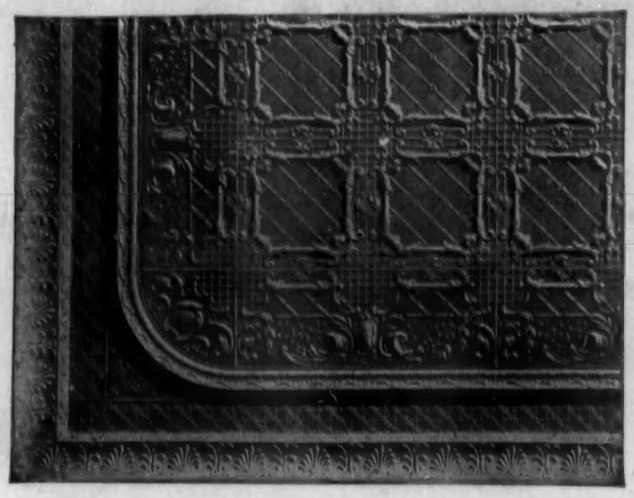
MILWAUKEE CORRUGATING CO.

MILWAUKEE, WIS.

WHEELING METAL CEILINGS

Many Cornice Shops and Sheet Metal Workers Are Taking Up the Erection of Metal Ceilings—Indoor Work During Inclement Weather

Ask Us About the Erection of Metal Ceilings



Easy to Erect By Any Good Workman

CEILING DESIGN NO. 8254

Our Working Drawings Are Plain. Easily Understood. Each Plate Located

MADE ONLY BY

WHEELING CORRUGATING COMPANY

WHEELING, W. VA.

BRANCH OFFICES AND WAREHOUSES

New York City, 47-51 Cliff Street — Chicago, 23 and 27 N. Clinton Street — St. Louis, 112, 114, 116 South Eighth Street

Philadelphia, 402, 404, 406 Race Street — Boston, Mass., 132 and 134 Pearl Street — CHATTANOOGA, TENN.

HAVE YOU EVER HEARD OF A TARRED RAG ROOFING WITH A *GUARANTEE* LIKE THIS?

A PURE RE-HAMMERED CHARCOAL IRON BASE AND ALL THE COATING THAT CAN BE PUT ON IT

New York Boston Philadelphia — **THE BERGER MFG. CO., CANTON, O.** — Chicago St. Louis San Francisco

1907—OUR GUARANTEE—1932

We Will Replace Without Charge Any of Our

ALUMINUM COATED

Conductor Pipe, Eaves Trough, Roof and Box Gutters, Valley, Ridge Roll, Mitres, Elbows and Shoes

That Rust Out Within 25 Years!

Look for Brass Label on each Joint with above guarantee. Write for Sample and Prices

The Reeves Manufacturing Company,

Department B. CANAL DOVER, OHIO

SIX STANDARD PRODUCTS

USED BY ALL THE LEADING STOVE AND RANGE MANUFACTURERS:

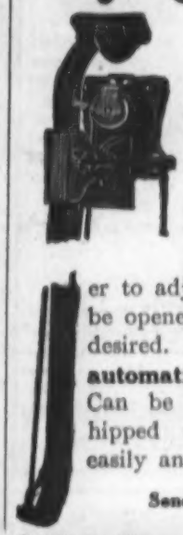
W. Dewees Wood Company's Patent Planished **Iron.**
Wood's Cleaned Refined Smooth Finish.
Hammered Polished Steel.
Wood's Oak Stove Body.
Wellsville Polished
Range Steel.

MANUFACTURED BY

AMERICAN SHEET & TIN PLATE COMPANY

FRICK BUILDING PITTSBURGH, PA.

Skylight Lift



A **new** device whereby a skylight can be raised or lowered as easily as a weighted window. Constructed of steel and malleable iron, has a movable slide holder to adjust itself, and can be opened to any distance desired. Always locks **automatically,** open or shut. Can be applied to either hipped or flat skylights easily and quickly.

Send for Pamphlet

C. Bickelhaupt Skylight W'ks

243-245 West 47th St., NEW YORK

Trade "G.H." Mark

"Target and Arrow Old Style Brand Roofing Tin"

C. Flickinger, of Erie, Pa., a roofer of forty years standing, says:—"I have tin roofs put on in 1867, in this city, that have not cost the owner a dollar outside of the cost of painting. One of our old customers told me the other day of a roof I put on thirty-seven years ago. He never paid a cent for repairs."

Mention this to the man who considers using some cheap roofing material.

OLD STYLE
REGISTERED
TRADE MARK
N.&G.TAYLOR CO
PHILADELPHIA

Fac-simile of the Trade-Mark stamped on each sheet of the "TARGET-AND-ARROW Old Style" tin. Registered in U. S. Patent Office.

TARGET AND ARROW Old Style roofing-tin is handled by all leading hardware jobbing houses throughout the United States.

Note that we now use the old name for the brand—"TARGET AND ARROW Old Style."—rather than the words "Old Style," which have been imitated in every possible way by other tinplate houses.

Send for our "Guide to Good Roofs," giving arguments in favor of tin roofing.

N. & G. TAYLOR COMPANY

Established 1810 Philadelphia

MONARCH ROOFING

SECURE
PROTECTION AND LONG SERVICE BY USING OUR
ASPHALT ROFING
SAVES REPAIRING
SAVES RECOATING
SAVES RENEWING
Send for Samples and Pamphlet
STOWELL MFG. CO
JERSEY CITY, N. J.

Clipper Lawn Mower Co. DIXON, ILL.

Manufacturers of Hand and Pony Mowers, also Marine Gasoline Engines from 2 to 8 horse power.

THE MOWER
That will kill all the weeds in your lawns

If you keep the weeds cut so they do not go to seed, and cut your grass without breaking the small feeders or roots, the grass will become thick and the weeds will disappear. The Clipper will do it. If you wish Clippers, send in your orders.

What's The Use?

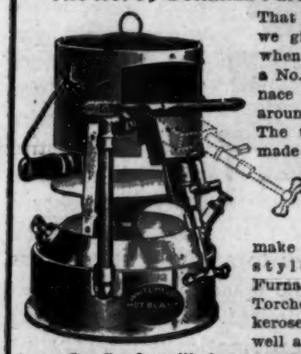
No. 5 Fire Pot, $4.50 Net

Don't experiment. We've done that for you at a cost of thousands of dollars and made good. Proof is abundant. Study our line of Fire Pots and Torches and be convinced. It bristles with merit. A booklet—free for the asking—tells you all about a varied group of fires suited to all requirements. It's worth while to know what we can do for you and it COSTS ONLY ONE CENT POSTAGE.

Jobbers sell at factory price, or we will ship direct upon receipt of $4.50

Clayton & Lambert Mfg. Co., Detroit, Mich., U. S. A.

Hottest on Earth
The No. 39 Bonanza Furnace



That is what we give you when buying a No. 39 Furnace for all around work. The tank is made of seamless drawn brass. We make many styles of Furnaces and Torches for kerosene as well as gasoline. Our Catalog will give you full particulars. Order through any jobber, or send us $4 50; we will ship direct.

THE TURNER BRASS WORKS,
26 Park Ave., Sycamore, Ill.

INTERCHANGEABLE
LOCK-CORNER SHELF BOXES
For the Hardware Trade.
THE A. H. GREEN CO.,
97-101 Warren St., NEW YORK.

SUPERIOR
Gas Soldering Furnace

Have you seen it?

Do you know it's a fuel saver—gives more heat than any other make on the market?

Do you know it's the best constructed, lowest priced "furnace" to be had?

There are thousands in use giving absolute satisfaction.

It can't be beat.

Send for printed matter and prices.

G. M. YOST MFG. CO., Mechanicsburg, Pa.

Thompson Bros., Muscatine, Ia.
Write: "Please stop our ad. for Tinner. The first issue brought results."

FREE
to anyone for asking **CATALOGUE** showing complete line of
TINNERS' AND ROOFERS' SUPPLIES.

Large stock, great variety, prompt shipments.
Get our prices.

BERGER BROS. CO., OFFICE AND STORE, 237 Arch St.; WAREROOMS, 100-02-04 Bread St.; FACTORY, 3114-16-18-20 N. 17th St., PHILADELPHIA.

Patent allowed Jan. 26, 1907.

Any infringement will be prosecuted to the full extent of the law.

Marvin Safety Flue Thimble
MADE OF GOOD QUALITY GALVANIZED IRON

We claim this to be a life saver a property saver and the only absolutely safe flue thimble made.

No more walls disfigured by driving nails in them to hold pipe in place.

No more trouble of the pipe entering the flue far enough to shut off the draft.

Write for particulars.

Salesmen wanted to introduce to Hardware Jobbers.

Manufactured by

MARVIN MANUFACTURING COMPANY, Oberlin, Kansas.

Iwans' Volcano Revolving Chimney Top

Sizes 6 to 12 inches. Sold by jobbers of Hardware and Tinners' Supplies.

Notice one of its **Strong Features.** The upward sloping opening in back of hood creates a constant upward draft, no matter how depressing the atmosphere.

You need it for some of your customers' chimneys.

Send postal for catalogue.

IWAN BROTHERS
Mfrs. of Hardware Specialties
STREATOR, ILL.

The Gem No. 4
With Self-Closing Door

We offer "*Gem* No. 4" as the most attractive and handsomest box on the market—besides having the self-closing door—the strongest feature ever placed on a Rural Mail Box.

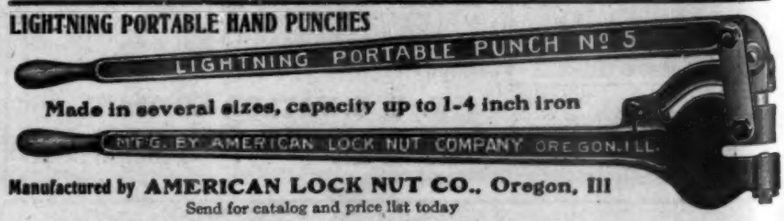
We sell this to you at the same price that you have been paying for boxes without special features—without anything to help sell them. You can **insist** on your jobber furnishing you with the "*Gem* No. 4," or, if he will not, we will name you a special delivered price.

With the "GEM No. 4" you can secure *nine-tenths* of the Rural Mail Box Trade.

We make **seven** different styles of Rural Mail Boxes and the "City *Gem*" for city deliveries and the two best selling **all-steel** barn door latches on the market; also, the "Automatic" Truck for the easy handling of nail kegs, spools of barb wire, etc.—a cure for the "Hardware Backache." You d better send for our Catalog "E" **today.** It contains net prices on articles that are sought after by the hardware trade. REMEMBER—"The Early Bird," etc.

THE PECK-HAMRE MANUFACTURING CO., Berlin, Wis.

LIGHTNING PORTABLE HAND PUNCHES



Made in several sizes, capacity up to 1-4 inch iron

Manufactured by AMERICAN LOCK NUT CO., Oregon, Ill

Send for catalog and price list today

The OLD RELIABLE STAR SAFETY RAZORS

Used for a quarter of a century by men of all nations.

Move all the time; invariably satisfies the customer.

The SECRET
The 3 STARS BLADE

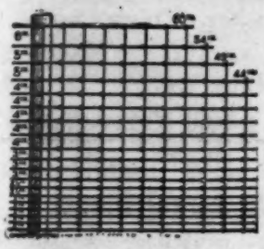
Manufactured under a process peculiar to Kampfe Brothers.

Highest Award Wherever Exhibited:
Paris, 1900 Buffalo, 1901 St. Louis, 1904 Portland, 1905

Write for Quotations and Secure an Agency.

KAMPFE BROTHERS,
Manufacturers. 8-12 Reade Street, NEW YORK

THE DENNING FENCE



Is the fence that pleases your customer. It is made on scientific and practical principles. It is made in various sizes, weights and meshes, for stock, hogs, poultry and rabbits. We can also sell you Lawn and Cemetery Fencing, Gates, Barb Wire, Nails, Staples, Portable Corn Cribs and Grain Bins.

Write for Catalogue and Prices

THE DENNING WIRE & FENCE CO.
CEDAR RAPIDS, IOWA.

Make More Money

Rural Routes are going in all around you. New boxes are needed on old routes. You should get this business. You *can* get it with

Bates-Hawley Patent **SIGNAL MAIL BOX**

It is the original box for Rural Routes with special endorsements of Postmaster General. The best made, the best liked, the best advertised and the easiest sold.

SIGNAL MAIL BOX CO.
106, Benton St., JOLIET, ILLINOIS.

THE SHAVEZY GUARD

May be adjusted to any blade,
Instantly changed from right to left.
Is the best and a Cheap Guard.

Get my prices, which are right.

L. T. WEISS, Sole Manufacturer
288-290 Taaffe Place, BROOKLYN, N.Y

Buckeye Paints

are unquestionably the best, most durable and economical line of paints manufactured

Our products are designed to meet the wants of all classes of paint consumers. We guarantee all paints and varnishes bearing our name. Made of the best material obtainable.
Send for catalogue.

Buckeye Paint & Varnish Co.
TOLEDO, OHIO

Blick No. 3 The Best Box
FOR RURAL FREE DELIVERY

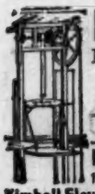
$5.88 Per Dozen

BE JUST WITH CUSTOMERS

Sell them Blick No. 3 boxes. They are big ones, 6½x8½x 19 inches. Made of heavy galvanized steel. Paints, green, the new Government color. Same shape and color as city boxes. Have Positive-Locking Flag Signal, Automatic Latch, Water-Tight Quality. Every box tested, every box right, every box warranted. They will get the business. You better get them. Order now.

$5.88 per Doz.

BLICK-WILLIAMS CO.
INDIANAPOLIS, IND.



ELEVATORS

Improved Quick and Easy, Rising Steam, Electric and Hand Power.

SEND FOR CIRCULAR

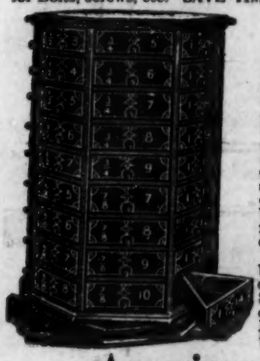
KIMBALL BROS. CO.

1031 Ninth St., COUNCIL BLUFFS, IOWA

Kimball Elevator Co., 139 Vincent St., Cleveland, O.

Revolving Cases

for Bolts, screws, etc. SAVE TIME and MONEY



A necessity for Hardware Dealers, machine shops pattern shops, and in fact any one who handles small articles. Last indefinitely. Made octagonal or square as desired; also with blank drawer fronts with label holders.

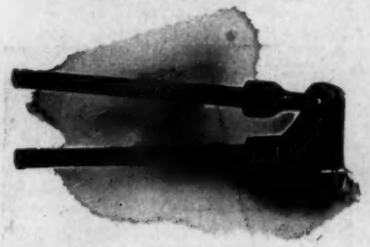
Descriptive booklet sent on application. Sold by all first class Hardware Dealers.

American Bolt & Screw Case Co.

DAYTON, OHIO

H. WEISS & CO.

20 Cliff St., New York



Hand Punch for No. 10 Iron

Skylight Gearing and Chain Lifts

Tinsmiths' and Plumbers' Tools. Cornice Makers' Tools. Coppersmiths' Tools Pipe Threading Machines

Second-Hand Goods Bought, Sold and Exchanged

Advertising is BUSINESS BAIT

COMBINATION PIPE AND NUT WRENCH

Head, Bar and Shank—One Piece Steel Forging.

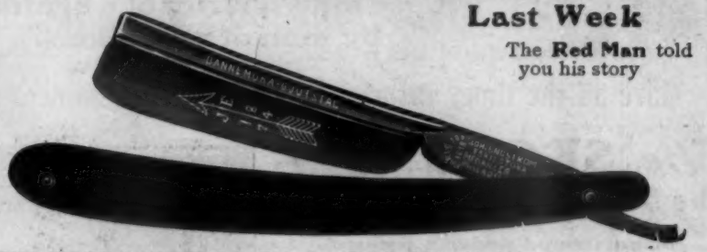
No. 45 Bright, With Long Nut.

Made from the best materials. Parts interchangeable. A strong and serviceable combination of a nut and pipe wrench. For general utility and all around convenience it has no equal. Send for Catalog and Prices.

BEMIS & CALL HARDWARE & TOOL COMPANY, SPRINGFIELD, MASS.

Last Week

The **Red Man** told you his story



THE WEEK BEFORE LAST the Ring Tail **Red Devil** had his say. I am the genuine Johan Engstrom Swedish Razor, made in the Land of the Midnight Sun. I have got a stiff back and a sharp edge. I shave anything that grows hair. If not, you may send me home. I have been made since 1784, therefore I am no new spinster. I have been tried and tested.

Have you got me in stock? **The Genuine Johan Engstrom Swedish Razor.**

SMITH & HEMENWAY CO.

108-110 DUANE STREET - NEW YORK CITY

Combined Punch and Shears.

Tools for Sheet Metals

INCLUDING

Tinners' and Roofers' Tools, Shears, Punches, Presses and Dies, Can-Making Machinery

MADE BY

NIAGARA MACHINE & TOOL WKS., Buffalo, N.Y.

The "Matchless" Double-Acting Floor Spring Hinge

is what its name implies.

Ball Bearings insure ease of operation and absence of friction and noise. These hinges are simple and durable in construction and are *made to fit any door*, be it Bank, Church, Vestibule or Pantry.

Get complete catalogue and price list by addressing Dept. A.

LAWSON MFG. CO.

40 Dearborn Street, Chicago.
101 Reade Street, New York.

$15 "GEM" Adding Machine

OVER 3,000 IN USE IN THE HARDWARE TRADE

With a Resetting Device that clears the dials to zero instantly. A High Grade Mechanical Production. Does the work of High Priced Machines. **Carries Totals** automatically. Clears to zero automatically.

ADAPTED TO ALL LINES OF BUSINESS.

Let Us Send You One On a 10 Days' Trial at Our Expense

ADDRESS

Mr. A. I. GANCHER

AUTOMATIC ADDING MACHINE CO.

332 BROADWAY NEW YORK CITY

Goodell-Pratt Company
GREENFIELD, MASS., U.S.A.
HACK SAWS
FAMOUS FOR TEMPER AND CUT
HAND AND MACHINE BLADES OF ALL STANDARD LENGTHS AND WEIGHTS.
Catalogue Free

TREADLE PUNCH

This Treadle Punch is designed especially for Sheet Iron Shops. It is built with either foot treadle or overhead hand lever, or both combined, as desired. We build a complete line of Shears, Punches and Forming Rolls all sizes for hand or power.

BERTSCH & CO.
CAMBRIDGE CITY, IND.

PULLMAN
SASH BALANCES

Are you selling them?
IN USE EVERY-WHERE
Send us your orders

PULLMAN MFG. COMPANY
ROCHESTER, N. Y., U. S. A.

Freezes two flavors of Ice Cream or an Ice or Sherbet and Ice Cream at one and the same time in one freezer — something entirely new, never done before.

"American Twin"

"Lightning"

"Blizzard"

THEY ARE
Well Advertised,
In Demand,
Easily Sold,
Satisfactory in Use,
Of Known Reputation.

THEY EXCELL IN
Easy Running,
Quick Freezing,
Economy,
Convenience,
Practical Results.

THE BEST ICE CREAM FREEZERS in practical use, because convenient, compact in size, use smallest amount of ice and salt, run easily, freeze quickly, produce smoothly frozen creams or desserts with little bother and less work.

Sold by leading jobbers. Catalog sent free.

North Bros. Mfg. Co., Philadelphia

Magic Pattern Rule Will Lay Out Patterns

For any size and angle of elbows in three minutes' time. Can also be used as Straight-edge Rule, Circumference Rule and Trammel. Should be in every Tinshop. Will save its cost in a few weeks. Thousands are in use and every one giving excellent satisfaction.

Price, complete in a nice Wooden box with Chart, $4.00 net cash

LUFKIN RULE CO., SAGINAW, MICHIGAN (Mention THE AMERICAN ARTISAN)

AKRON ECLIPSE LEVELS

All glasses in Akron Eclipse Levels are carried on elastic bearing and enclosed in heavy glass tubes and are almost unbreakable.

SEND FOR CATALOGUE ILLUSTRATED IN COLORS

The BAKER McMILLEN CO., Akron, Ohio, 13 Bowery St.

STRAP & T HINGES
Pressed
Steel Shelf
Brackets

BUTT HINGES
Barn Door
Hangers
and Track

Our Planished Steel STRAP and T HINGES are now all made on Automatic Machinery—Every one is as true as a Die. Our BUTTS are unequalled in Workmanship and Finish, All our Goods Guaranteed—BEST IN THE WORLD. (And they cost no more.)

THE GRIFFIN MFG. CO., Erie, Pa.

Marlin

To kill a grizzly bear at one shot requires a mighty powerful cartridge and a strong, accurate gun. Poor guns have cost many lives among big game hunters. But whether the game be dangerous or not the *Marlin* man always gets perfect service.

Marlin rifles are sure, simple, strong and accurate.

Marlin rifles are comfortable to carry, balance well and come to the shoulder with that ease and certainty which guarantees good shooting always.

Marlin rifles are made in all calibers for all kinds of game.

Send 6 cents in stamps for a catalogue, and you will surely find the gun you have been looking for, be it anything from .22 to .45-90.

The Marlin Firearms Co.
95 Willow Street, New Haven, Conn.

The Dollars You're After

will come to you with less effort the moment you invest a few of them in a trial order for the

IMPERIAL ROTARY WASHER

It's noiselessness—easy operation (has all-steel roller bearings)—handsome finish—gold and aluminum bronze castings—help sell it so quickly.

When you write for prices ask for our catalogue. It shows the most complete line of washers on the market.

Established 1871.

THE BLACKSTONE MFG. CO., Jamestown, N. Y.

LIPPINCOTT WATER-MOTORS

For polishing, grinding, running FANS, SEWING MACHINES, WASHING MACHINES, ICE CREAM FREEZERS, etc., etc.

"YOUR FAUCET IS YOUR POWER"

The Best Line a Dealer Can Handle.

Fig. 3—Motor with Spur Gear Attachment and Air Pump.

Fig. 1—Six-Inch Motor and Emery Wheel.

Fig. 1—shows the 6-inch motor attached to an ordinary faucet and carrying a small emery wheel for grinding purposes.

Fig. 3—used for charging storage tanks for pumping Automobile tires, and for soldering, brazing' artists' air brushes, and other purposes requiring air at a pressure of from 10 to 125 lbs.

We Also Make

ENGINE INDICATORS
REDUCING WHEELS
PLANIMETERS, Etc.

LIPPINCOTT S. S. & S. CO., Newark, N. J.

THE EASY Washing Machine

It Sells on Sight Stays Sold

Has the largest rubbing capacity and is the EASIEST RUNNING machine on the market.

Write at once for our Attractive, Exclusive Agency Offer.

Manufactured by

The
Easy Washing Machine Company
SAINT MARYS, OHIO

Selling Dry Batteries?

Staple as Nails. Almost every Electric Bell, telephone and telegraph instrument operates with a battery—usually our popular "Mesco"

Gas and Gasoline Engines, Automobiles, Motor Boats, and Cycles use batteries for ignition—usually our "Red Seal"—best by test.

Are you ready to meet demand for renewals?

"Mesco" Dry Batteries sell for 15 cents each. (Cost you 10 cents in hundred lots).

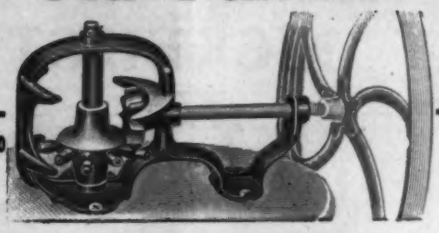
"Red Seals" sell for 25 cents (cost you 16½ cents in hundred lots).

Write for Catalogue 22H, and proposition— mentioning this journal. Address nearest house.

Manhattan Electrical Supply Co.
New York, 17 Park Pl. Chicago, 188 Fifth Ave.
Largest Manufacturers of Electrical Supplies in America.

THE MANTCROSS CO., 40 Dearborn St., CHICAGO

Old Faithful



Is there a Dealer who has not heard of

The "O. K." Rotary

that every day good faithful dependable washer of which there are hundreds of thousands in daily use and every one a satisfaction giver, and the best repeater for sales known? **If you are that dealer,** it's time to get acquainted. A postal will do.

H. F. BRAMMER MFG. CO., DAVENPORT, IOWA

STANDARD HORSE NAIL CO.
NEW BRIGHTON, PA., U.S.A.
MANUFACTURE
A Full Line of Horse Nails
Send for Catalogue, Prices & Samples.

The SPIDER

that will not scorch or burn even the most delicate dainty sauce or gravy. Will not absorb grease or flavor. Does not get smeary, dirty, unsanitary. Always clean, sweet, hygienic. Never warps.

"NEVER-BREAK"

Name always stamped on the handle.

You should have our complete catalogue.

The AVERY STAMPING CO.
Cleveland, Ohio.
EXCLUSIVE MANUFACTURERS.

The White Daisy

THE MOST PERFECT RUBBER TYPE OF WASHER EVER PRODUCED

Double Ball Bearing Throughout, Corrugated Tub, Hinged Cover, Adjustable Drip Board and **Fully Guaranteed.**

WHITE LILY MANUFACTURING CO.
TOLEDO, OHIO DAVENPORT, IOWA

We Have a Hardware Delivery Wagon That You Can Depend Upon

Body 20 in. from the ground; full width; regular heighth wheels; and yet will turn short.

EASY TO LOAD AND UNLOAD

Durability guaranteed.
Complete catalogue on request.
Mention this paper and address in full.

SYCAMORE WAGON WORKS
109 Edwards Street, SYCAMORE, ILL.

AGATE NICKEL-STEEL WARE

AGATE L&G Mfg. Co. NICKEL-STEEL-WARE

Is absolutely free from poisonous substance, is made by careful, experienced men, by a company founded in 1850. The first enameled ware and blue and white ware made in this country was made in our mills. We know how to make enameled ware safe and durable. We make it safe and durable because we are proud of the trade mark. Look for the blue label.

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CHICAGO, NEW YORK BOSTON

Seamless Non-Leak Pyrolite Ware

Quadruple-Coated White Lined
Durability and Finish Unsurpassed
Shape Scientifically Correct and Assortment Unequalled

Noteworthy features: Rivetless Seamless Spouts and Lips on Tea Kettles, Tea Pots, Coffee Pots, etc. Positively **without** a seam and therefore **absolutely Non-Leak.**

Open Stock Plain Turquoise at New York

The demand for **Good** Enameled Kitchen Ware is **insistent** and **increasing.** Particularly when your customers **hold you personally responsible.**

Seamless Pyrolite Samples on request; no obligation, Catalog No. 5.

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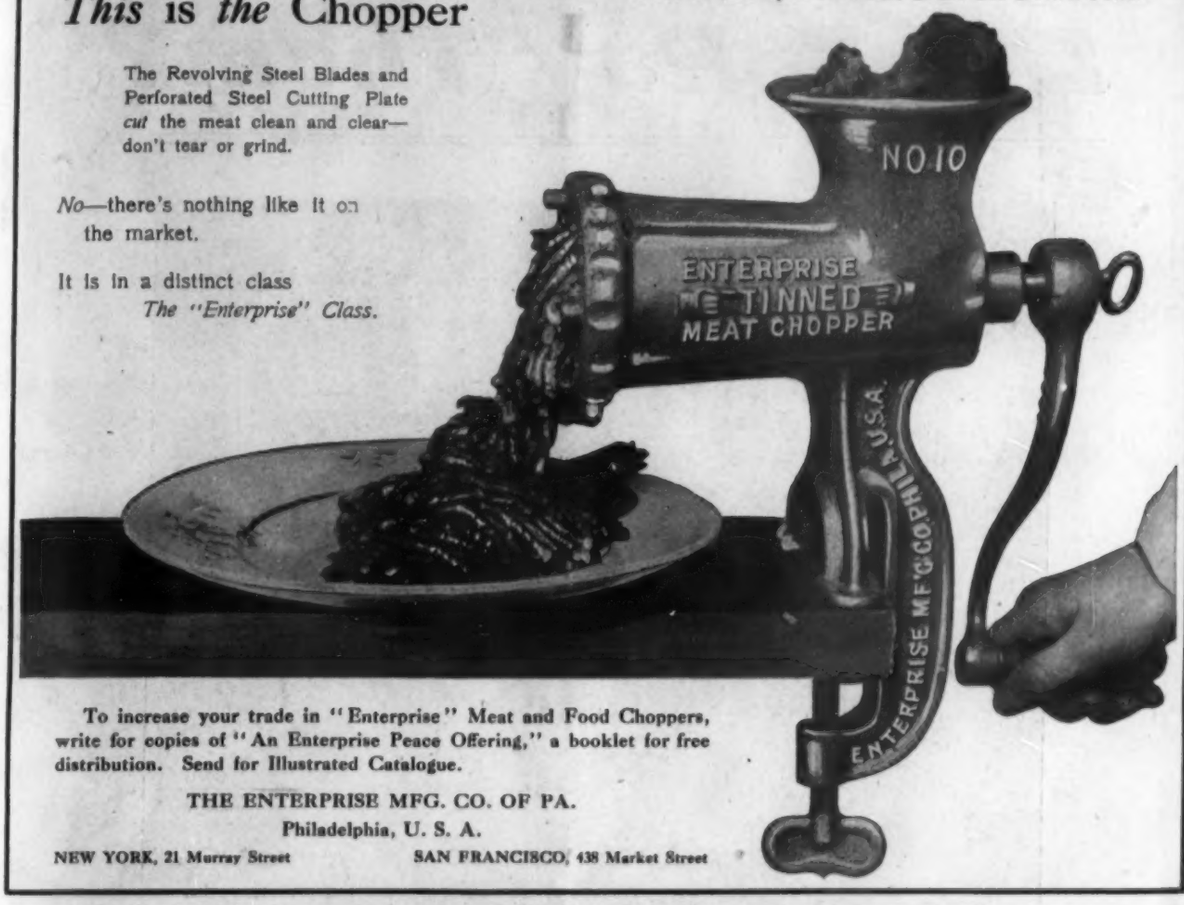
This is *the* Chopper

35 Sizes and Styles for Hand, Steam and Electric Power

The Revolving Steel Blades and Perforated Steel Cutting Plate *cut* the meat clean and clear—don't tear or grind.

No—there's nothing like it on the market.

It is in a distinct class
The "Enterprise" Class.



To increase your trade in "Enterprise" Meat and Food Choppers, write for copies of "An Enterprise Peace Offering," a booklet for free distribution. Send for Illustrated Catalogue.

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Philadelphia, U. S. A.

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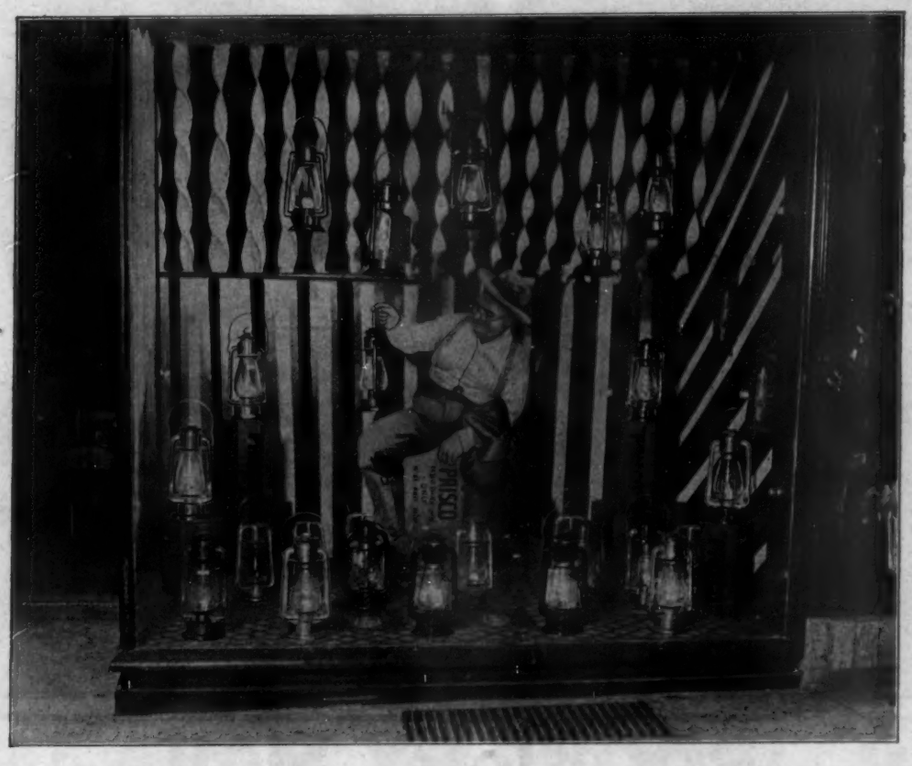

CARTHAGE, MO., May 26, '07.

The Pritchard-Strong Co., Rochester, N. Y.

GENTLEMEN:—We find that since putting in your lantern display, we have sold out almost all of our first order, and this is a dull season for lanterns.

For a special attraction, we filled the lanterns in the window and lit them at a certain time, offering a prize lantern, to the one guessing the lantern which would burn the longest. This, with the display, did the work for us.

Yours very truly,
DRAKE HARDWARE CO.

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GENTLEMEN:—* * * * * We have made a special effort in window dressing for the last two years and your window was one of the best we have ever displayed and we found it more than worth while, as it was a trade winner in that line and the season was practically over. It not only sold us lanterns but increased our sales in other goods more than enough to pay for the advertising.

Yours very truly,
DRAKE HARDWARE CO.

ASK YOUR JOBBER HOW TO GET UNCLE OBEDIAH, OR WRITE

THE PRITCHARD-STRONG CO.,

25 Circle Street, ROCHESTER, N. Y.

To Sheet Metal Workers

The "TIN ROOFER'S HANDBOOK," issued by this Association, will be sent free, postpaid, on request to anyone interested in the roofing question. This book on tin roofing gives points useful to every sheet metal worker. It explains why the following facts are true about

A GOOD TIN ROOF

It is light in weight, perfectly clean, and neat in appearance.

It is easily put on, adaptable to any kind of roof, and if damaged, it can be repaired quickly and cheaply.

A roof of good tin is not affected by heat or cold, and is the most weatherproof form of roofing that can be had at any cost.

It is the best known protection against fire, excepting only reinforced concrete or hollow tile.

It is the most durable roofing material that can be obtained, and economical as well.

The "HANDBOOK" explains these facts at length, giving every tin roofer arguments to present to his customers.

We want every tin roofer to have a copy of this book. It will be mailed to the trade early in September. If you fail to receive your copy of the "HAND BOOK" write to President Seabrook and one will be sent you.

NATIONAL ASSOCIATION OF MASTER SHEET METAL WORKERS

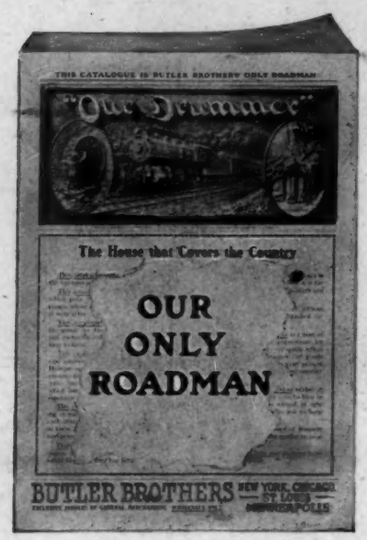
SEP 9 1907

READY—FREE

Our Fall Catalogue

The September number of our monthly catalogue is ready for mailing. Regular customers will get it without—and not-yet customers may have it FOR the asking.

Either way—make sure of your copy because it will PAY you to do so.



No matter how big or how little are your purchases—the time has gone by when any merchant can buy RIGHT without knowing what we offer.

Consider our present four-house outlet—our world-wide buying organization—our saving catalogue-only way of selling.

Consider, too, the PERMANENCE of our amazing growth—sure sign that our own prosperity is based upon the prosperity of our customers.

Then say can you AFFORD not to give us the even chance of a fair and thorough comparison—which is all we ask?

Give us that comparison—at your home—by going carefully through the fall issue (No. MC 627) of our monthly catalogue which already is the buying guide of thousands of America's shrewdest retailers.

Or—in market—see the same complete lines and the **same net prices in plain figures** on our sample floors in any of these six cities:

NEW YORK CHICAGO ST. LOUIS
MINNEAPOLIS BALTIMORE DALLAS

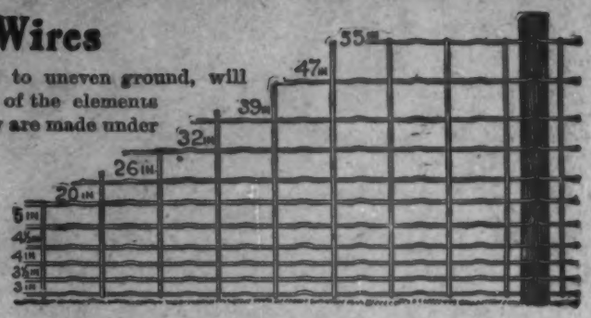
Wholesalers of General Merchandise

BUTLER BROTHERS

The House That Covers the Country

"Pittsburgh Perfect" Fences

All Galvanized Steel Wires



Are durable, strong and adjustable. They can be adjusted to uneven ground, will surb in the strongest beast and will withstand the attacks of the elements longer and surer than any other fence on the market. They are made under the same favorable conditions and as carefully as all the

"Pittsburgh Perfect" Brands

of Wire Rods, Annealed, Bright and Galvanized Smooth Wire, Barb Wire, Twisted Cable Wire, Fence Staples, Wire Nails, Steel Hoops, Bands and Cotton Ties. Dealers can sell goods readily which are

MANUFACTURED BY

The Pittsburgh Steel Co., Pittsburgh, Pa.

DISSTON **CHROMOL** HACK SAW BLADE

Made of Chromol Steel—A special high grade material peculiarly suited for metal cutting blades. The Teeth are MILLED in—making them clean and sharp, giving greatest possible strength. Hardened throughout underDisston Special Process.

Taking the CHROMOL SAW day in and day out, we guarantee it will DO more satisfactory work than any other hack saw on the market.

Made under DISSTON BRAND only.

HENRY DISSTON & SONS, Inc.

PHILADELPHIA, PA.

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Favorite Shotgun, No. 20

A Small Shotgun at a Nominal Price.

Made in .22 and .32 calibres. Specifications same as our Favorite Rifle No. 17, excepting smooth bore. List price $6.00

GENTLEMEN: The .32 calibre Favorite Shotgun that I have been using for some time is a "Marvel of efficiency." It is a terror to rats and hawks around the barn. Up to 20 yards I do not consider it has an equal in such a small bore. Yours truly,

New York City. J. VON LENGERKE.

Ask Your Jobber. Be Sure to Specify STEVENS. Write for Descriptive Matter.

J. STEVENS ARMS & TOOL COMPANY,

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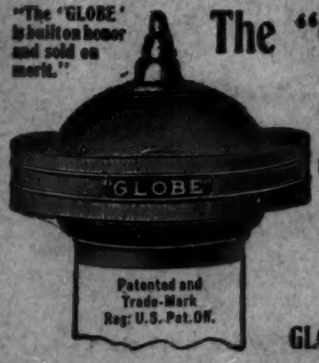
THE IMPROVED ONE-PIECE MITER

This miter is made absolutely correct, true to shape, size, and bead, and the easiest connecting slip joint. Will save your time and temper. In case your supply house cannot furnish them, send your order direct to the

J. E. WHITACRE MFG. CO.
ROCKFORD, ILL.
Manufacturers of Sheet Metal Specialties.

"The 'GLOBE' is built on honor and sold on merit."



The "GLOBE" Ventilator

in COPPER, GALVANIZED IRON and with Glass Tops for Skylight purposes

Absolutely Storm Proof

For Perfectly Ventilating Schools, Churches, Halls, Mills, Factory and Audience Rooms of Every Character

SMOKY CHIMNEYS CURED

"GLOBE VENTILATED RIDGING"

Send for Pamphlet

Manufactured by

GLOBE VENTILATOR CO., Troy, N.Y.

STAY-IN Flue Stoppers

are **guaranteed** to be absolutely soot proof. Cannot be jarred or blown from flue hole.

Finished In Brass and Nicely Decorated

MANUFACTURED BY

STUBER & KUCK, Peoria, Ill.

We Also Manufacture PIECED TINWARE and All Styles of FLOUR SIFTERS

IT TAKES 25 TIMES LONGER

to produce OPEN HEARTH material than it does to RUN a heat of Bessemer.

IT TAKES LONGER STILL

to HAMMER the ingots into billets & then roll them into bars & plates.

DO YOU THINK

we would use this EXPENSIVE PROCESS if we

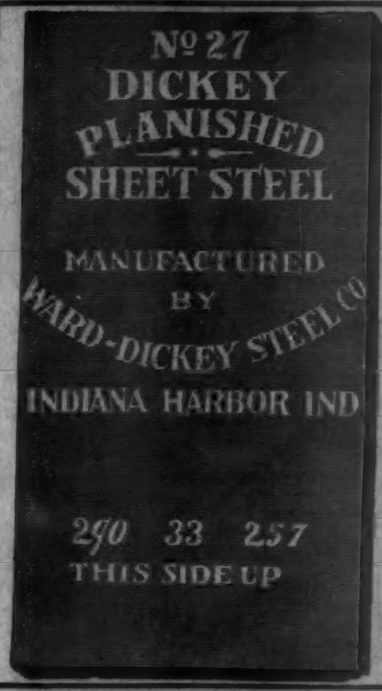
DID NOT KNOW

that the

HAMMERED OPEN HEARTH BASE

we thus obtain for OUR BRIGHT TIN and ROOFING PLATES is the VERY BEST it is POSSIBLE TO SECURE?

Follansbee Brothers Company,
PITTSBURGH.



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Soft Tough

HOLDS COLOR UNDER LONG AND HIGH HEATS :: ::

No Breakages

This Space for Sale.
Inquire of Daniel Stern,
69 Dearborn St., Chicago

Technologist

Vitreous Enameling

Designs and builds new plants. Improves quality and reduces cost in those already established.

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PRESERVING SEASON IS HERE

WE MAKE PRESERVING KETTLES
From 2 Qts. to 18 Qts., in

Blue and White and Gray Mottled Enameled Ware

ALSO OVER 500 OTHER FAST SELLING ITEMS

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ALL KINDS

WE MAKE EXPANSION PARTS TO FIT THE BOLTS AND SCREWS YOU HAVE IN STOCK

ANYTHING TO FIT FROM THE SMALLEST WOOD SCREW TO THE LARGEST LAG OR MACHINE

Samples and Catalog on Request

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By advertising and using
THE
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They make chimneys draw, give tinners employment making stocks and give the dealers profit.

Sold by Hardware Jobbers and Dealers.

Made only by
POWERS BROS.
Streator, Ill.
This cut free to dealers

THE "CENTENNIAL"

RAIN-WATER CUT-OFF

The strongest, most durable and cheapest CUT-OFF on the market.

The only single cut off made to fit Corrugated and plain pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers.

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